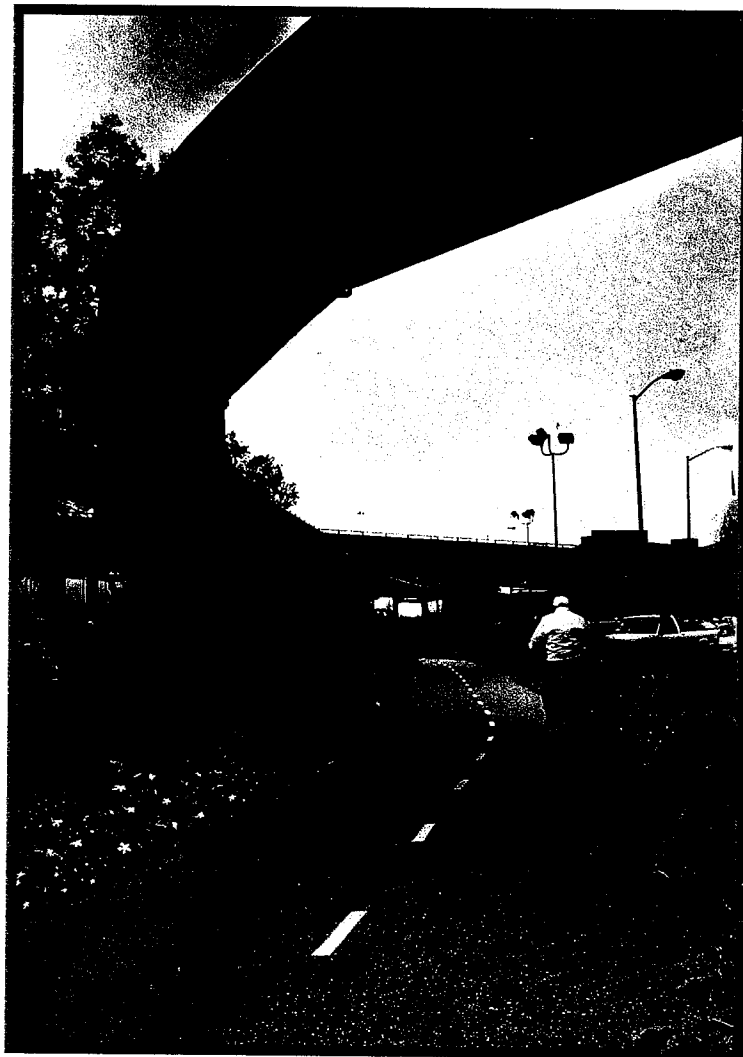




# Mission Creek Bikeway and Greenbelt Concept Plan



**Prepared for:**  
Metropolitan Transportation Commission

**Prepared by:**  
Rails-to-Trails Conservancy  
Madrina Group  
San Francisco Bicycle Coalition  
San Francisco Department of Parking and Traffic

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# MISSION CREEK BIKEWAY AND GREENBELT CONCEPT PLAN

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*Mosaic Mural by Laurel True and Lillian Sizemore at 16<sup>th</sup> and Harrison produced for the Mission Creek Bikeway Markers Project by Judy West*



[www.missioncreek.org](http://www.missioncreek.org)

# Acknowledgements

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# 1. INTRODUCTION

The idea for the San Francisco Mission Creek Bikeway and Greenbelt (MCB) was conceived in 1991 when the Southern Pacific Railroad abandoned the Mission Creek line along Division Street. The remaining swath of continuous open land presented an opportunity to revitalize this historic corridor to meet the changing needs of San Francisco's post-industrial neighborhoods. From the intersection of 16<sup>th</sup> and Harrison Streets in the Northeast Mission district, along Treat Avenue and Division Street, around and through the 8<sup>th</sup> and Townsend Circle, to the Caltrain tracks bordering Mission Bay, the abandoned railroad corridor traces the route of the once navigable Mission Creek. In addition to salvaging an important transportation asset, the Bikeway and Greenbelt Project also provides an opportunity to educate the public about the natural drainage hidden beneath the City streets and to promote the environmental stewardship of the San Francisco Bay and Estuary.

By providing a safe route connecting the Mission District to Mission Bay, the Mission Creek Bikeway has the potential to relieve congestion by making the eastern waterfront more accessible to the residential neighborhoods to the west. Creating a human-scaled environment in the midst of elevated freeways and industrial buildings, a bikeway and greenbelt will encourage greater bicycle/ pedestrian activity while improving aesthetics along the historic Mission Creek rail corridor.

## Project Description

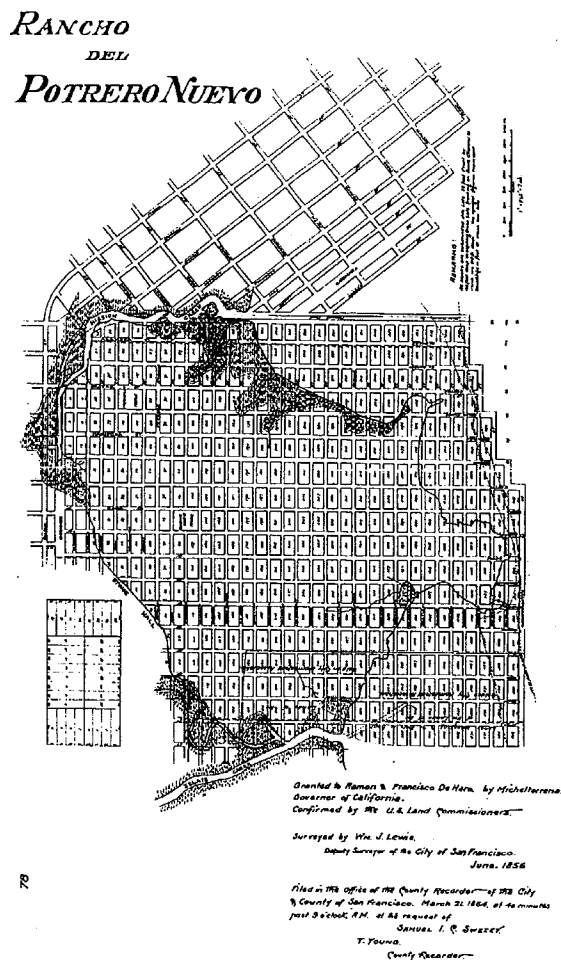
Specifically, the Project's goal is to provide a continuous bicycle/ pedestrian route linking the corner of 16<sup>th</sup> and Harrison to the bikeway planned along the south side of the Mission Creek Channel, the last remnant of what was once Mission Creek. Between 16<sup>th</sup> St. and Bryant, modifications are proposed to Treat Ave. including traffic calming, landscaping, and restrictions on through traffic to allow the creation of a "bicycle boulevard." Between Bryant St. and Vermont, a Class I, off street bikeway is proposed along the south side of Division under the Central Freeway, utilizing private land that would need to be acquired via purchase or land trade (see Land Acquisition Strategies, page 38). After Vermont, striped bike lanes, a Class I bikeway and other traffic calming projects are proposed on either side of the 8<sup>th</sup> and Townsend Circle to De Haro Street. From here, a path through a planned residential development would lead users to a proposed bicycle/ pedestrian bridge crossing both 7<sup>th</sup> St. and the Caltrain tracks, connecting directly to the planned Mission Creek Park, with its bicycle and pedestrian paths leading to Pac Bell Park and the Embarcadero Promenade.

## Historic Setting

Before the Spanish arrived at Mission Bay in 1775, the Ohlone Indians had inhabited the area for at least 5000 years. The Ohlone harvested mussels and fish, paddling up Mission Creek in tule reed canoes to what is now the Mission District. At this time, most of what is now Market St. and SOMA was sand dunes, with extensive marshes and wetlands lining the banks of the Creek. When the Spanish arrived, Mission Bay and the Creek flowing into it provided a safe harbor for the new immigrants, who made a permanent settlement slightly uphill, along

the fresh water stream flowing from Twin Peaks into the fertile estuary. The main road they constructed from the Mission to the Bay became Center Street and eventually 16<sup>th</sup> Street.

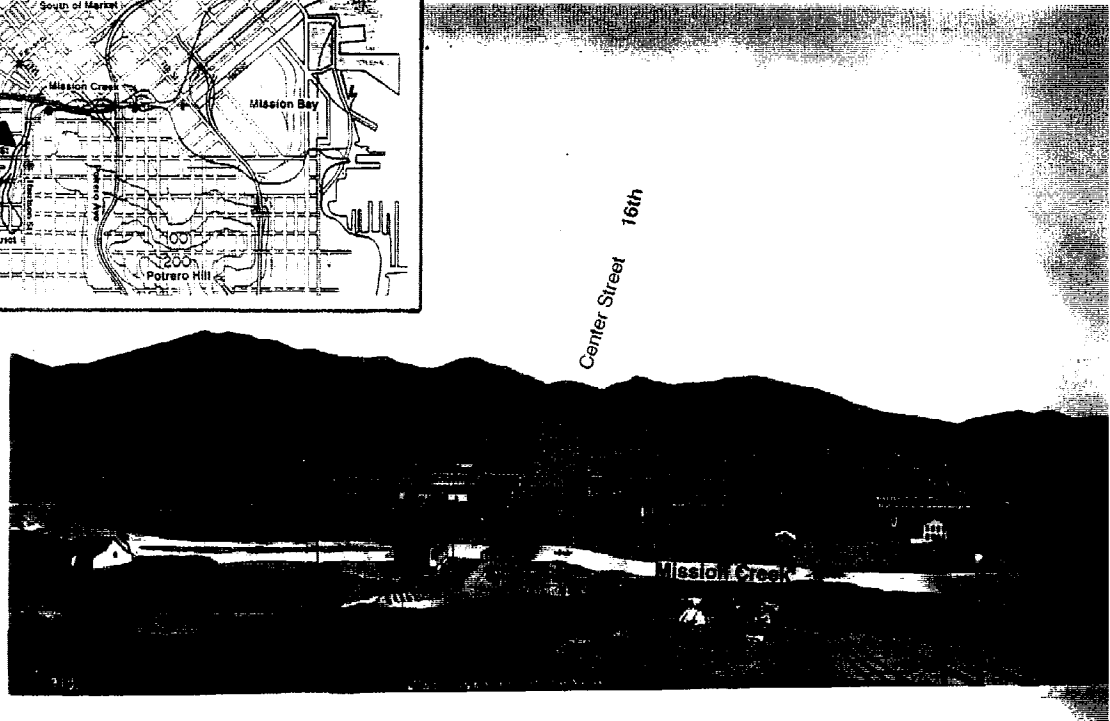
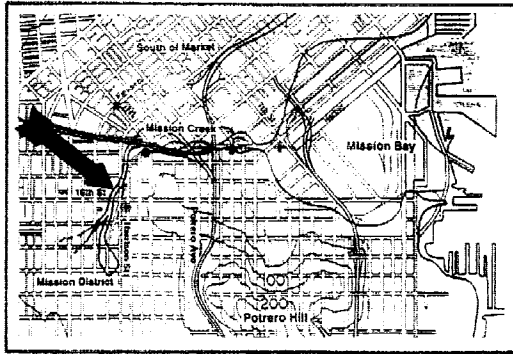
Living conditions at the Mission were deteriorating on their own when the Mexican revolution of 1810 ended the stipends to the Spanish Fathers and a generous system of land grants was established to assist new Mexican settlers. A few families laid claim to most of the land around the Mission: the Bernal's claimed Potrero Viejo (from Islais Creek to Hunters Point) and the De Haros claimed the Potrero Nuevo (from Mission Creek to Islais Creek). The map that accompanied the De Haro land grant shows intimate details of the river and shoreline. (see Exhibit 1 below) The De Haro rancho was located near 15<sup>th</sup> and Potrero, two blocks uphill from the river. Today a collection of fine brick buildings marks the location.



*Exhibit 1: De Haro Land Grant Map (bounded by Mission Creek to the north, and Islais Creek to the south) and European depictions of Ohlone*

Once the Gold Rush hit, squatters took possession of nearly everything that wasn't occupied, and very few of the large Mexican land grants survived intact.

The primary commercial activity developed along the city waterfront and harbors. Mission Creek was designated a navigable stream and a drawbridge constructed where Potrero crossed over to Brannan which allowed boats to reach as far inland as Center (16<sup>th</sup>) Street, where another major crossing was constructed (see Exhibit 2 below).

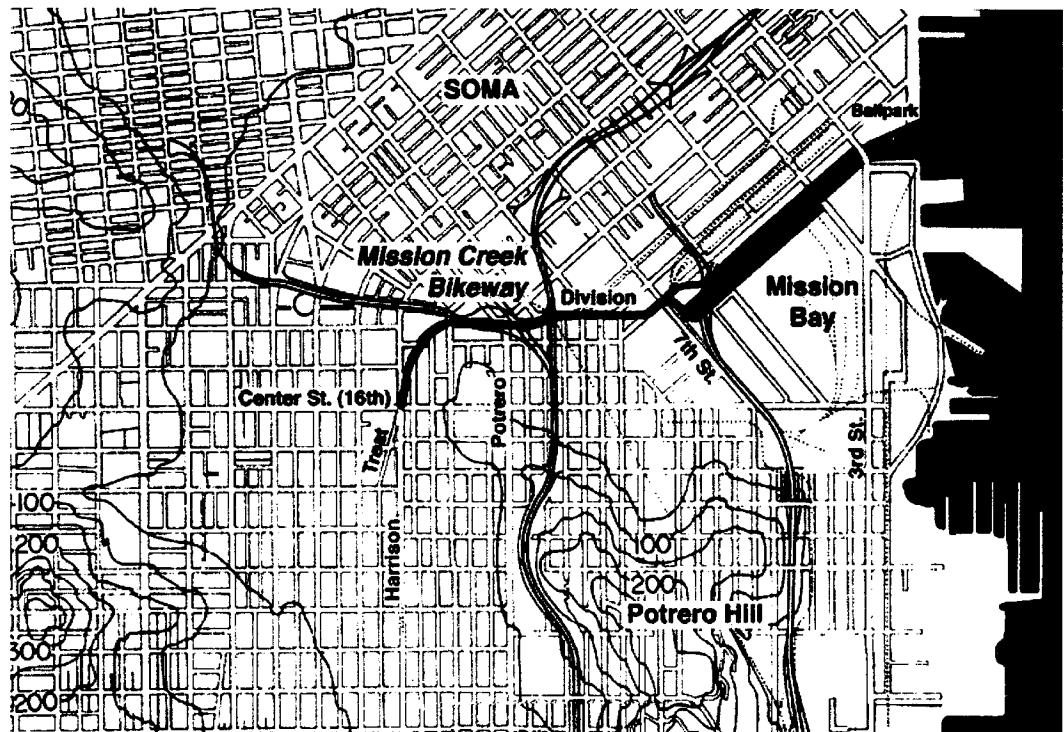
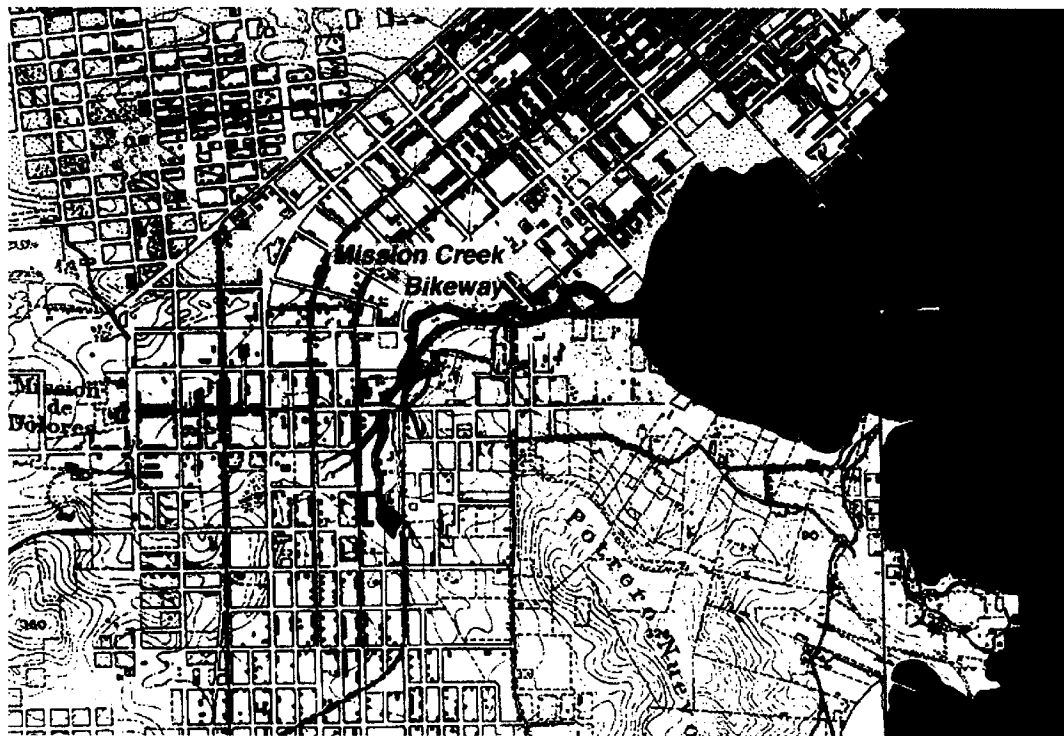


*Exhibit 2: This drawing circa 1860 depicts the bridge over Mission Creek at 16<sup>th</sup> Street where the entrance to the Mission Creek Bikeway is proposed. This drawing inspired the mosaic mural installed at the same corner.*

In the late 1860s a railroad was built from San Jose to San Francisco, entering from the south through the Bernal Gap (San Jose Ave) and continuing north along the east side of Mission Creek on what is Harrison Street today. Exhibit 3 (following page) shows the railroad on the US Coast and Geodetic Map of 1869 next to a recent map of the City. The 1869 map is particularly informative because enough of the current street grid had been constructed to be useful as a reference today, yet the river was still present on the surface.

Shortly thereafter Mission Bay was filled in with sand and debris, as was the fate of most of San Francisco's waterfront property, and the Creek was buried in culverts and forgotten. The name "Division Street," was given to the street later built on top of the river itself, because it divided the three street grid systems of SOMA, the Mission, and Potrero Hill. The rail corridor that was built alongside the river preserved a lasting reminder of the natural terrain, nearly hidden by the rectangular street grid that obliterated everything else. The swath of land which remains, provides an educational tool and opportunity to remind us of the river underground, and the natural environment which is so often lost in a dense urban setting.





*Exhibit 3: These maps show the US Coast and Geodetic Survey of 1869 (above) and a current map of San Francisco (below) with the Mission Creek Bikeway highlighted in green. The 1869 map shows the two bridges over Mission Creek at 16<sup>th</sup> Street and Potrero. The small island near the mouth of Mission Creek, where it opened into the Bay, is where the Townsend Traffic Circle is today. Note that the river delineates the northwestern extent of Potrero Nuevo.*

## Current Setting

As of 2002, much of the former Southern Pacific railroad land has been purchased by private interests and appropriated for parking lots, making such a bikeway and greenbelt project more difficult today than it would have been a decade ago, when the railroad abandoned their corridor. Fortunately most of the land has not been developed, due to its alignment over sewer easements and under the elevated Central Freeway, and the majority of the corridor remains intact today. Where development over the former rails has occurred, sufficient street right-of-way exists to accommodate a bikeway.

This concept plan proposes to utilize key sections of this abandoned railroad corridor through San Francisco's eastern industrial districts, where redevelopment efforts are changing the area's character into high-density residential and commercial mixed use.

These land use changes are primarily due to:

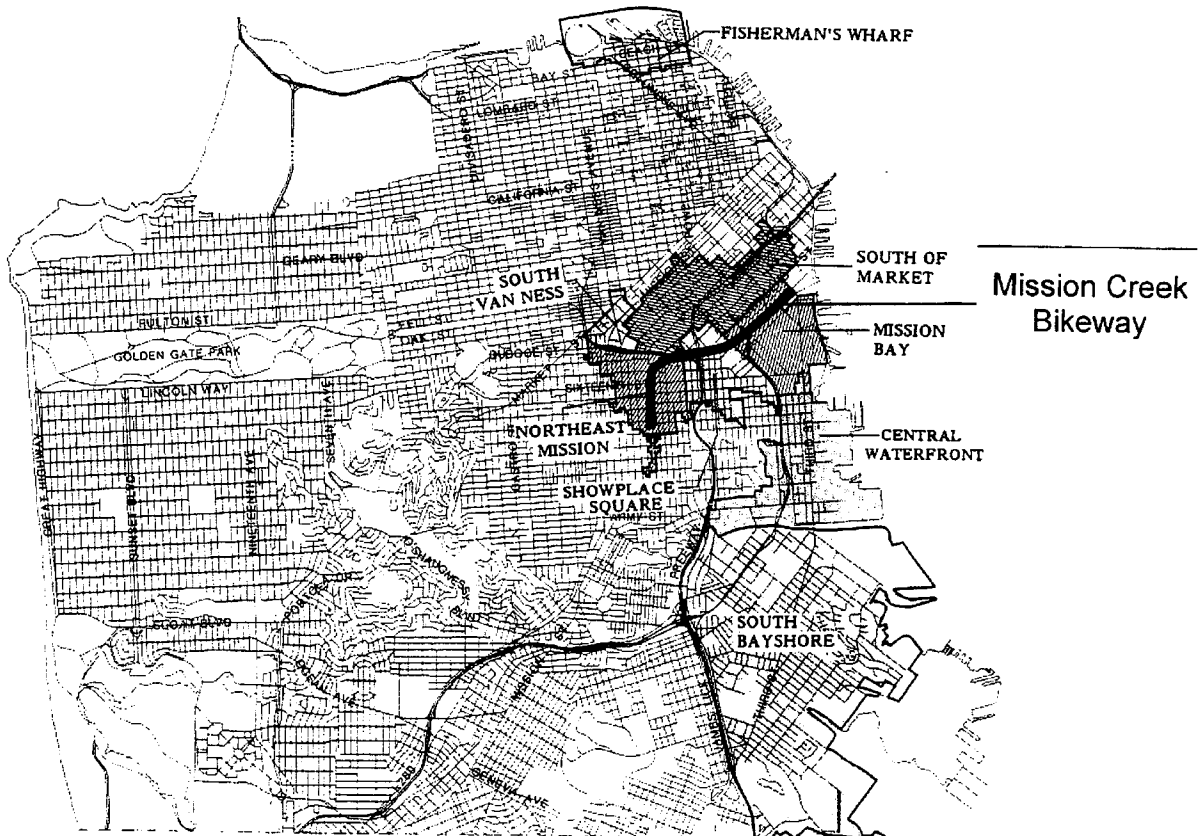
1. shifts in business from industrial to high tech;
2. UCSF campus development at Mission Bay;
3. an increasing demand for housing.

This area is the focus of renewed interest and intense development efforts because it is one of the few areas in San Francisco where significant land is available for development (see Exhibit 4: City Map with industrial districts & MCB highlighted).

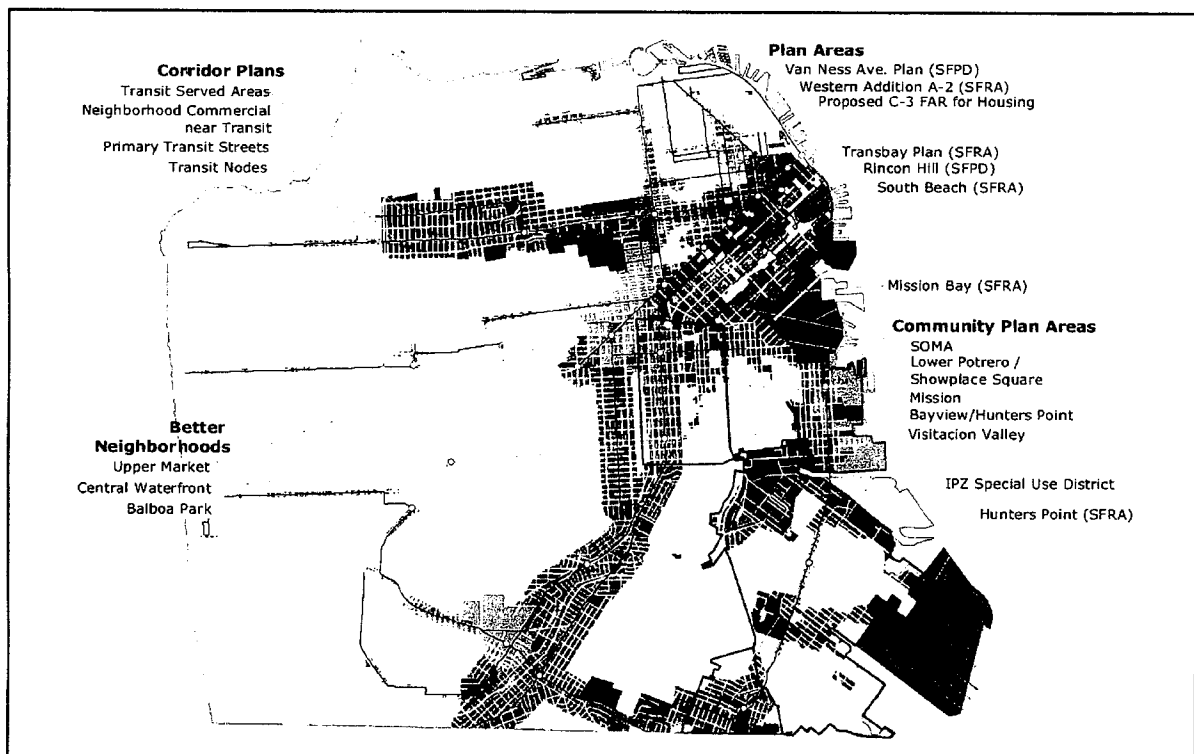
Development at Mission Bay is coordinated through a redevelopment process with significant public oversight and planning. Yet the surrounding commercial districts of South of Market, the Northeast Mission, Showplace Square and the 3<sup>rd</sup> Street Corridor east of Potrero Hill, have changed rapidly in the last 5 years, independent of a coordinated effort by the San Francisco Planning Department. Most of the empty lots and derelict warehouses have been replaced by private developers with multi-story residential and commercial buildings bringing many more people to the area, adding to already severe traffic congestion.

The rapid pace of recent land use changes in the City's southeast quadrant has resulted in concern by citizens and policymakers alike. Better urban planning is needed, to avoid potential conflicts between residential and industrial uses, to preserve land for future development, and to mitigate the consequences of increased density and population. The SF City Planning Department has undertaken a number of long range planning efforts described in their 2002 report "Profiles of Community Planning Areas: San Francisco's Eastern Neighborhoods." Exhibit 5: Citywide Action Plan is taken from this report. The MCB is located in the very center of this redevelopment and planning effort, as can be seen in the exhibits on the following page.

At the east end, Mission Bay, the 4<sup>th</sup> St. Caltrain Station, and Pac Bell Park are new and important destinations that could be made more accessible to SF residents by implementing the Mission Creek Bikeway. But just as important, bicycle commuters crossing Division Street (say from the Civic Center to Potrero Hill or Showplace Square) will also benefit from improvements to the complex intersections, which are difficult to avoid and confusing for all



*Exhibit 4: San Francisco Map with Industrial Districts and Mission Creek Bikeway*



*Exhibit 5: SF City Planning - Citywide Action Plan*

users of the route (autos, trucks, bikes and pedestrians). The Showplace Square area at the 8<sup>th</sup> and Townsend Circle has become a busy pedestrian area in recent years, which will only increase with the completion of large, new housing projects and ground-floor retail slated for the area.

Plans for Mission Bay call for an impressive network of bicycle routes within the boundaries of the redevelopment area (See Appendix A Mission Bay Bicycle and Pedestrian Network). Yet safe access for bicyclists and pedestrians traveling between Mission Bay and other neighborhoods has not been a priority for the Mission Bay planning effort. There is currently only one dedicated bicycle facility connecting Mission Bay with adjacent neighborhoods – bike lanes at the 16<sup>th</sup> St. crossing. As of June 2002, these bike lanes are still under review by the SF DPT and the Peninsula Corridor Joint Powers Board, and may not be approved. The lack of non-motorized connections is distressing given the natural and artificial boundaries separating Mission Bay from SOMA and the Mission District, and the few crossings of the railroad tracks that provide access to this new neighborhood. The bridge proposed to cross the Caltrain tracks and 7<sup>th</sup> Street at Berry, as part of the Mission Creek Bikeway Project, would do much to improve non-motorized access to Mission Bay, especially from Showplace Square and neighborhoods to the west.

## **Future of the Corridor**

How this vital artery is handled over the next decade will have a great impact on whether this central part of the City becomes a more livable community and integrates the neighborhoods surrounding it, or whether it increasingly becomes a physical barrier dividing these neighborhoods from one another.

Today Division St. is unparalleled as a transportation route. The major street grids of South of Market, the Mission, and Potrero Hill all intersect here, with 5 or 6 major thoroughfares coalescing along Division Street in several complex intersections. Division is too important a corridor to neglect the needs of bicyclists and pedestrians. New safety measures are needed, especially in light of the fact that the section of Division between Bryant St. and the Townsend Traffic Circle is a key link in the SF Bicycle Plan: Bike Route 36 (see SF Bike Map, Appendix B).

As difficult as it may seem to integrate more bicycles into this busy traffic pattern, there are only a few difficult intersections to address along the one-mile corridor, and these same intersections need improvements for automobiles as well. An alternative route, along Alameda Street, was considered during this study, which provides a less direct route parallel to Division (see page 20). But it does not provide the linkage to the South of Market street grid, the reason that Division is so crucial to automobile, and increasingly, to bicycle and pedestrian transportation.

As development in the area moves forward, and increased automobile traffic replaces the slow moving rail cars along Division Street, there is potential that the historic river and rail corridor will be forgotten amidst a maze of freeways and parking lots. There is another vision however.

The former Mission Creek Corridor could become a central bicycle/ pedestrian artery through San Francisco's newest neighborhoods. Strips and pockets of greenery could soften the industrial landscape, highlighting a safe route through a hostile environment for those on bike or foot, and rekindling an awareness of this once thriving riparian habitat.

A Mission Creek Bikeway and Greenbelt could be the pride of San Francisco. However, unless measures are taken soon to coordinate planning efforts in order to preserve this swath of land, the opportunity could be lost forever amidst rapidly expanding car-oriented development. The hope is that this project will act as a catalyst to revitalize the neighborhoods it passes through, inspiring private individuals and companies to combine their efforts with those of the City to create a world-class bikeway and greenbelt along the former river that nurtured the original settlement of San Francisco.



*Exhibit 6: Air photo taken in the early 1990's includes the entrance to the Mission Creek Bikeway at the far left, where Treat Ave. (and the river) cross diagonally over the rectangular street grid at Harrison and 16<sup>th</sup>. The harbor channel of Mission Bay can be seen at the upper right.*

## 2. OPPORTUNITIES AND CONSTRAINTS

Opportunities and constraints are listed in an effort to identify factors that will improve the project's value and lead to timely implementation, as well as prerequisites for construction that may be a challenge for public agencies to resolve.

### Opportunities

Six major opportunities were identified through consultation with city agencies, community organizations, and public stakeholders, including: demand for a prioritized bicycle/ pedestrian route; integration with the existing bicycle/ pedestrian network; improved connections to transit; packaging portions of the project with privately funded developments; creation of parklands and open space in this "park poor" neighborhood; and recognition of the natural and cultural history of the former Mission Creek.

#### **1. To increase levels of cycling and walking by creating an inviting, non-intimidating, useful bicycle and pedestrian corridor connecting key SF neighborhoods and destinations**

The Mission Creek Bikeway would provide badly needed non-motorized access through the very car-oriented area under the Central Freeway. The Bikeway would be designed in such a way that it would appeal to a diverse community, including those who do not typically ride a bicycle for transportation out of fear of street traffic. Because the proposed bikeway would either be separated from vehicle traffic, or utilize low-traffic, calmed streets, it offers non-cyclists an easy way to try urban cycling. Such an opportunity is rare in a city as dense as San Francisco. The swath of land that the railroad preserved for so long can continue to be preserved as a bicycle/ pedestrian corridor to fulfill an existing need, and to ensure that future transit options are preserved.

An example of how providing adequate bicycle facilities can dramatically increase levels of bicycling is Valencia St. in San Francisco. After two traffic lanes were removed and bike lanes striped in March 1999, cycling increased 144% during the PM peak hour.

#### **2. Integration with the existing San Francisco Bicycle/ Pedestrian Network**

The MCB will connect to numerous planned and existing Class II and III facilities. The western end of the project will connect with existing bike lanes on Harrison St. as well as the bike route leading to the Mission and Castro Districts along 17<sup>th</sup> Street. A potential connection from City Bicycle Route 36 to the MCB could be implemented through the new Best Buy parking lot by providing a Class I connection, avoiding what is now a very circuitous route via Harrison and 11<sup>th</sup> St. A connection with the Townsend St. bike route leading to the Caltrain Station also exists at the 8<sup>th</sup> and Townsend Circle. Bike lanes already exist on 7<sup>th</sup> St. from Townsend north to Market Street, connecting cyclists to the City's most well used bike route. An extension of these lanes between Townsend and 16<sup>th</sup> Streets has been approved by the Board of Supervisors and will be implemented shortly (See SF Bike Map, Appendix B).

**3. Provide multi-modal connections with BART 16<sup>th</sup> St. Station, Caltrain 4th & King Station, MUNI, and the San Francisco Ferry Building**

The construction of the MCB would close a long-standing gap between Central San Francisco residential neighborhoods and key regional transit depots. The 16<sup>th</sup> St. BART station is only five blocks west of the southwestern terminus of the project. In addition, MUNI has identified 16<sup>th</sup> Street as the alignment for a possible new light rail line between the BART Station and the 3<sup>rd</sup> Street light rail, which would intersect with the MCB at 16<sup>th</sup> and Harrison. The MCB would also facilitate access to Caltrain, bringing users to the Mission Creek Channel at 4<sup>th</sup> St.- only 2 blocks from the terminal or to 8<sup>th</sup> and Townsend, 4 blocks from the 4<sup>th</sup> and King Terminal along Townsend St. The connection to Caltrain is one of this project's most promising attributes. Increasing bicycle usage on Caltrain (6% of riders bring bicycles aboard), and the establishment of a Bikestation™ at the Caltrain 4<sup>th</sup> and King Station (expected within two years) all point to the need for provision of safe, attractive non-motorized circulation routes in the area.

A potential addition to the project would be to utilize the south side of Townsend St. to create a Class I landscaped bikeway between 7<sup>th</sup> and 4<sup>th</sup> Streets, and bike lanes between 7<sup>th</sup> and 8<sup>th</sup> Streets. With this extension, the Mission Creek Bikeway could directly connect to the Caltrain Station via the 8<sup>th</sup> and Townsend Circle. MUNI plans to provide enhanced light rail lines serving Mission Bay, which would also be accessible to MCB users at the eastern end of the project. Connecting with the Embarcadero Promenade at Pac Bell Park, bicyclists and pedestrians would also enjoy improved access to the F-line, as well as ferries to Marin, Alameda, and Solano Counties.

**4. Take advantage of developments occurring in the area to provide incidental construction and maintenance of segments of the trail**

Developments planned for 675 Townsend St. and 601 King St. are prime examples of privately funded projects that can incorporate elements of the MCB with no extra cost to taxpayers. The MCB planning team has already secured an agreement with AF Evans, who is working to redevelop the 601 King St. property, to include construction and maintenance of a one-block section of the MCB between King and Berry Streets (see Exhibit 17, 601 King St. Development, page 33). This is a model to follow as the City moves forward with planning for the rest of the MCB Project.

**5. Provide a new strip of parkland in a commercial/ residential area with little existing green space**

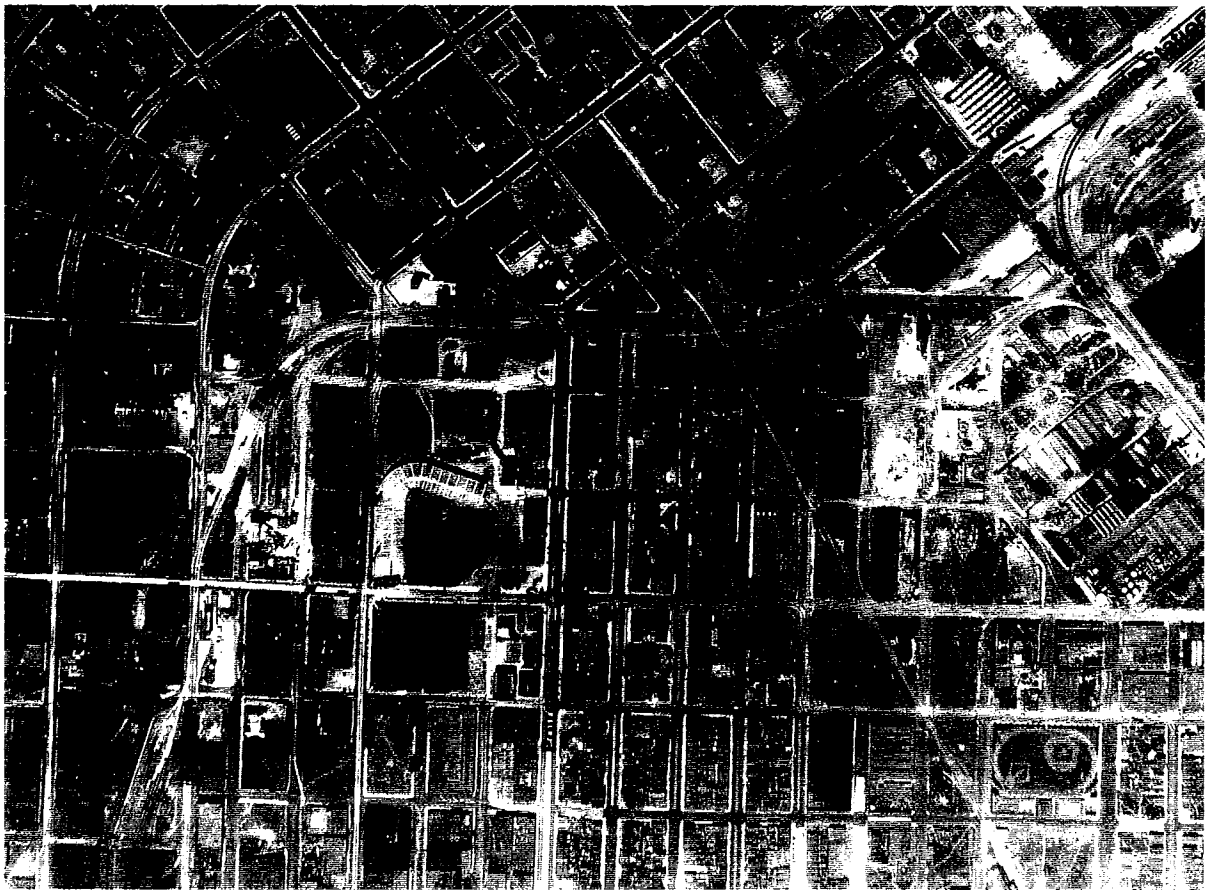
The Northeast Mission/ South of Market area is a very park-poor area, compared with other areas of San Francisco. The project would involve planting of new trees, greenery and other landscaping along the majority of the bikeway. In addition, more extensive "pocket parks" could be created in specific areas to enhance the user experience and attract sit down uses, such as lunch destination spots.

Areas suitable for implementation of "pocket parks" include: most or all of Treat Ave. between 16<sup>th</sup> and 15<sup>th</sup> Streets; a triangle of land at the corner of Bryant and Division; the northeast corner of 9<sup>th</sup> and Division; Caltrans property between San Bruno and Vermont; the triangle next to the Design Center at Division and Vermont; and the strip of land

(sewer easement) between King and Berry. In addition, unnecessarily wide, low traffic streets in the area could be narrowed with significant city-owned space thus becoming available for landscaping, bulb-outs, and wider sidewalks. Berry Street is a good example of such an opportunity.

**6. Revive and celebrate the natural history of the Mission Creek**

Numerous opportunities exist along the MCB to educate the general public that they are standing on one of San Francisco's major former navigable waterways. Public art, including sculptures, murals (such as the one at 16<sup>th</sup> and Harrison), stonework, and fountains are all within the realm of possibility. Kiosks detailing the natural and human history of the corridor could be installed at interesting and appropriate locations along the bikeway, such as where bridges were once located. Self-guided tours of the bikeway could be facilitated by signage that corresponds to brochures, available at the Caltrain Station, on the trains, at Pac Bell Park, and at bicycle shops. Themes to be reflected through public art could include history of the Ohlone, Spanish Missionaries, Mexican Rancheros, the railroad, and especially the Mission Creek itself.



*Exhibit 7: 1934 air photo of Mission Creek corridor, prior to Central Freeway*



## Constraints

Four issues that may constrain the ability of the City to actively move forward on the Mission Creek Project include a need for acquisition of private land, incorporation of Caltrans-controlled land, loss of available car parking, and two major intersections that pose safety issues to bikeway users and could degrade level of service (LOS) for automobiles.

**1. Several key parcels along the corridor are privately owned, requiring land acquisitions from private property owners**

The largest privately-owned segment of the former Mission Creek rail line is held by a San Francisco-based, family owned business: Byer Properties. The segment of the proposed MCB along Division, on either side of Potrero Avenue, is primarily used for vehicle parking and would need to be acquired from Byer Properties in order to fully realize the preferred alternative (see Land Acquisition Strategies section, p. 38). Working closely with Byer to ensure their support of plans for the Mission Creek Bikeway is essential to the success of the project. The planning team has received indications that Byer Properties would respond to a specific proposal by the City, but the company has not been responsive to proposals from the non-profits working on this project.

**2. Other key parcels under the Central Freeway are owned by the California Department of Transportation (Caltrans) that may be resistant to loss of revenue as a result of incorporating lands into the MCB**

Caltrans owns the land adjacent to the former rail spur from Bryant to Potrero, and leases it to Byer Properties for parking. This plan proposes to incorporate state owned land into the MCB, as well as to swap key parcels in a possible trade with Byer Properties. Caltrans would also require a specific proposal from the City to respond to, and would likely require compensation for lands used for the project.

**3. Concerns among some neighbors, business interests that a loss of car parking due to project implementation will be detrimental.**

Since abandonment of Southern Pacific's Mission Creek rail line in 1991, much of the corridor has been purchased by private interests and converted to parking. In addition, underutilized streets in the area such as Treat Ave. function as parking lots. Removal of dozens of spaces will be necessary to accommodate the new bikeway. If this project is paired with an associated increase in open space and parkland (beyond that proposed herein), the figure could be in the hundreds of spaces. On the bright side, creating a new bikeway in the area will reduce parking demand as a result of a transportation mode shift caused by the presence of a safe, aesthetically pleasing bicycle/ pedestrian route.

A possible solution that would mitigate loss of parking would be to relocate parking spaces to nearby City and Caltrans owned parcels that are currently underutilized. One option would be to vacate San Bruno Ave. between Division and Alameda (similar to what has been done along Utah St), and convert that area to a fenced parking lot. Other solutions could include development of a parking garage by the City or Caltrans, with spaces set aside for businesses that have contributed land for the bikeway. It can be definitively said that the Mission Creek Bikeway as a viable transportation facility will be impossible without significant parking removal and/ or relocation. Particularly along

Division Street there simply isn't adequate right-of way for development of a Class I bicycle facility without conversion of either on street or leased parking.

**4. Intersections at Bryant Street and Potrero Avenue pose challenges in creating safe conditions for bicycle/ pedestrian traffic under current local Level of Service (LOS) guidelines.**

If bicycle and pedestrian movements are to be accommodated in a safe manner, a dedicated crossing phase is necessary at both Bryant and Potrero. Such a dedicated phase will prevent cars from turning right or left across the paths of trail users who have the right-of-way, creating a safe passage.

The traffic modeling conducted by the SF DPT in conjunction with Parisi Associates engineers reveals that providing a dedicated phase will increase motor vehicle delay to Level of Service (LOS) F, meaning that motorist delay would exceed 60 seconds at peak times (see Technical Design Analysis, page 14). Under the current local CEQA guidelines, LOS E or F requires the need for further study, or a full EIR. EIRs are costly and time consuming, and can greatly delay, if not halt transportation projects.

The irony of this situation is that new bicycle and pedestrian improvements, aimed at reducing congestion and improving air quality, are being mired in lengthy and costly environmental review to document the effects of increased idling time of cars at intersections. Many groups, including the SFBAC, SFBC and Walk SF, have commented that this "catch 22" of transportation planning is one of the primary impediments to new non-motorized facilities in the City of San Francisco.

Over time, improvements to the SF Bike/ Ped Network would result in more trips being taken by bike or on foot. This mode shift would reduce emissions and decrease delay to automobiles. Yet these improvements are being prevented by placing too much emphasis on LOS analyses at isolated intersections. This outdated method of transportation planning needs to be addressed, not only for the benefit of this project, but also for transit/ bicycle/ pedestrian improvements in San Francisco generally.

State legislators have acknowledged this conflict by authoring new legislation (SB 1636 - Figueroa) that will exempt transit-intensive areas from LOS requirements. The Cities of San Jose and Santa Barbara have amended their general plans to acknowledge that current LOS standards are biased against bicycle and pedestrian safety and access, and that more balanced measures are needed.

**In the near term, the Board of Supervisors could expedite this project by passing a "statement of overriding consideration" and urge the Planning Department to issue a Negative Declaration, or mitigated Negative Declaration. Such action is frequently taken by the San Jose City Council to allow installation of sidewalks and bike lanes.**

### 3. TECHNICAL DESIGN ANALYSIS

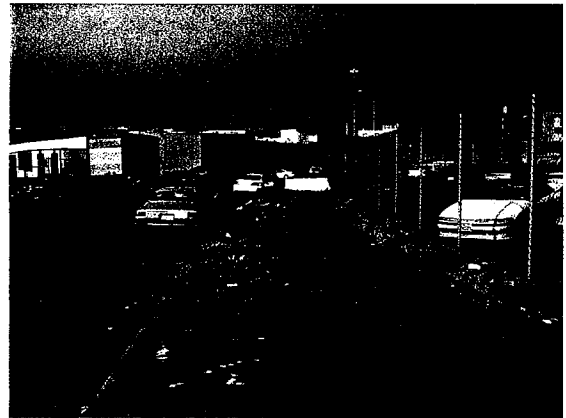
The Mission Creek Bikeway Project can be divided into four major segments, each with their own specific technical characteristics. For the segments with multiple alternatives, Alternative #1 is presented as the preferred alternative. In some cases, Alternative #2 could be considered as a first phase of improving a given segment. The segments are divided as follows:

1. Treat Avenue Bicycle Boulevard (Harrison to Bryant)
2. Division Street Bikeway (Bryant to Vermont)
3. Eighth and Townsend Circle (Vermont to Berry)
4. Crossing to Mission Bay (Berry to Mission Creek Park Bike Path)

#### Treat Avenue Bicycle Boulevard



*Treat Ave. looking south (SPCA Bldg. on left)  
SF AC&C dog park in center*



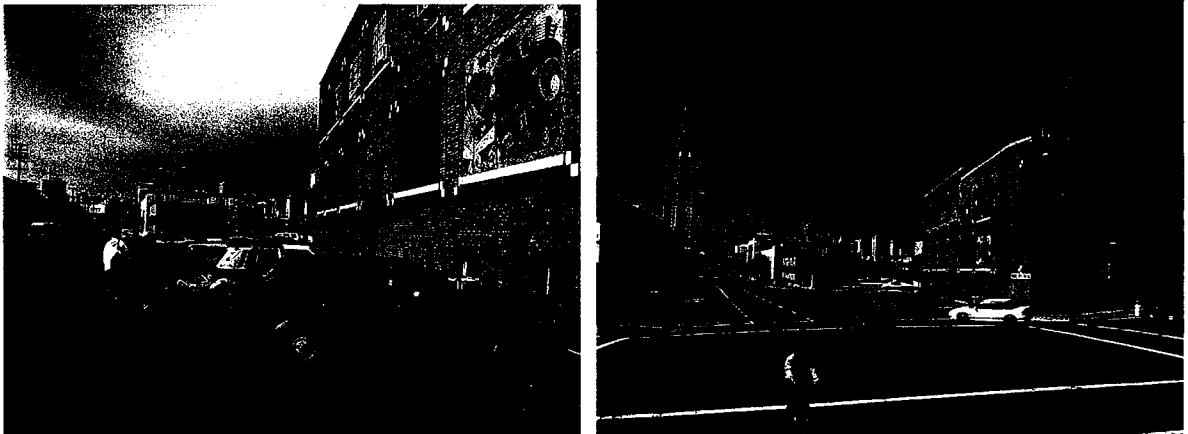
*Treat Ave. looking northeast, additional 15 foot  
strip was added to ROW in 1996.*

Treat Avenue is a relatively quiet street, curving to the northeast through a series of large commercial and industrial buildings. The primary conflict with bicyclists and pedestrians would be truck loading and unloading. The SF Animal Control and SPCA facilities are located at the south end of the Treat Ave. segment, and there is concern from staff that volunteers walking dogs could conflict with bicycle traffic. Because of constrained width, potential conflicts at loading zones, and a desire to provide adequate separation between bicyclists and pedestrians, the design team decided to plan the Treat Ave. section as a bicycle boulevard.

Bicycle boulevards are considered Class III bicycle facilities, and have been implemented successfully in many communities all over California, including a bicycle boulevard network in Berkeley and a regional bicycle boulevard along Bryant St. in Palo Alto. Bicycle boulevards are typically flat, low-traffic streets that are protected by stop signs on cross streets. The removal of stop signs along the bicycle boulevard itself provides bicyclists

priority at intersections and allows them to maintain momentum -- a critical design characteristic that makes bicycle transportation more efficient and appealing. There is usually at least one intersection along a bicycle boulevard that prohibits through motor vehicles, yet permits through bicycle and pedestrian traffic. This discourages drivers from using the street as a "cut through," and makes the street more attractive for non-motorized users. There are frequently traffic circles at intersections and other traffic calming devices along the street to slow remaining motor vehicle traffic to a safe speed.

## Mission Creek Bikeway Entrance at 16<sup>th</sup> and Harrison



*Two perspectives of the 16<sup>th</sup> and Harrison Bikeway Entrance- note the lack of sidewalks*

**16<sup>th</sup> and Harrison Alternative #1:** This is the long-term alternative that would create an area of landscaped open space at the entrance of the MCB, resulting in the removal of significant numbers of parking spaces (see exhibits 8, 9 & 10, following pages).

Under Alternative #1, the entrance of the Mission Creek Bikeway and Greenbelt at 16<sup>th</sup> and Harrison would be designed for bicyclists and pedestrians only, with bollards to prevent motor vehicles entering or exiting Treat Ave. at this location. The design of this entrance allows northbound cyclists on Harrison St. entering the MCB to maintain momentum by providing a wide angle between the bikeway and Harrison St. Cyclists traveling southwest along Treat Ave. wanting to turn left on Harrison will use the bikeway exit, designed to approach Harrison at a 90-degree angle to improve visibility and discourage cyclists from proceeding to the corner of 16<sup>th</sup> and Harrison on the wrong side of the street.

A new island would be constructed between the entrance and exit at Harrison St., providing an opportunity for landscaping. A new sidewalk would be constructed beginning at the northeast corner of 16<sup>th</sup> St. and Harrison passing under the existing Mission Creek mural, and continuing north along the east side of Treat Ave. to 15<sup>th</sup> Street. An additional sidewalk will be installed on the east side of Harrison St. The planning team considered the location of the loading dock at Quinn Printing in its design. Curb cuts across the sidewalk maintain motor vehicle access to this business. Use of this loading dock is infrequent and vehicles are not expected to interrupt pedestrian traffic on a regular basis.

**16<sup>th</sup> and Harrison Alternative #2:** This is the short-term, or interim, strategy that would provide basic bike/ pedestrian facilities with minimal landscaping to maintain use of a portion of this area for parking (see exhibit 10).

Under Alternative #2, 15<sup>th</sup> Street at Harrison would become a one-way entrance to a new parking facility, with 10 parking spaces being kept along the north side of 15<sup>th</sup> St. between Harrison and Treat. Twenty diagonal parking spaces would also be installed alongside the bike path. Cars would exit this lot at Treat and Harrison at a separate exit from the bikeway.



*Exhibit 8: Rendering of bikeway entrance at 16<sup>th</sup> and Harrison  
by Ivor Thomas, UCB Planting Design Course (similar to Alternative #1)*

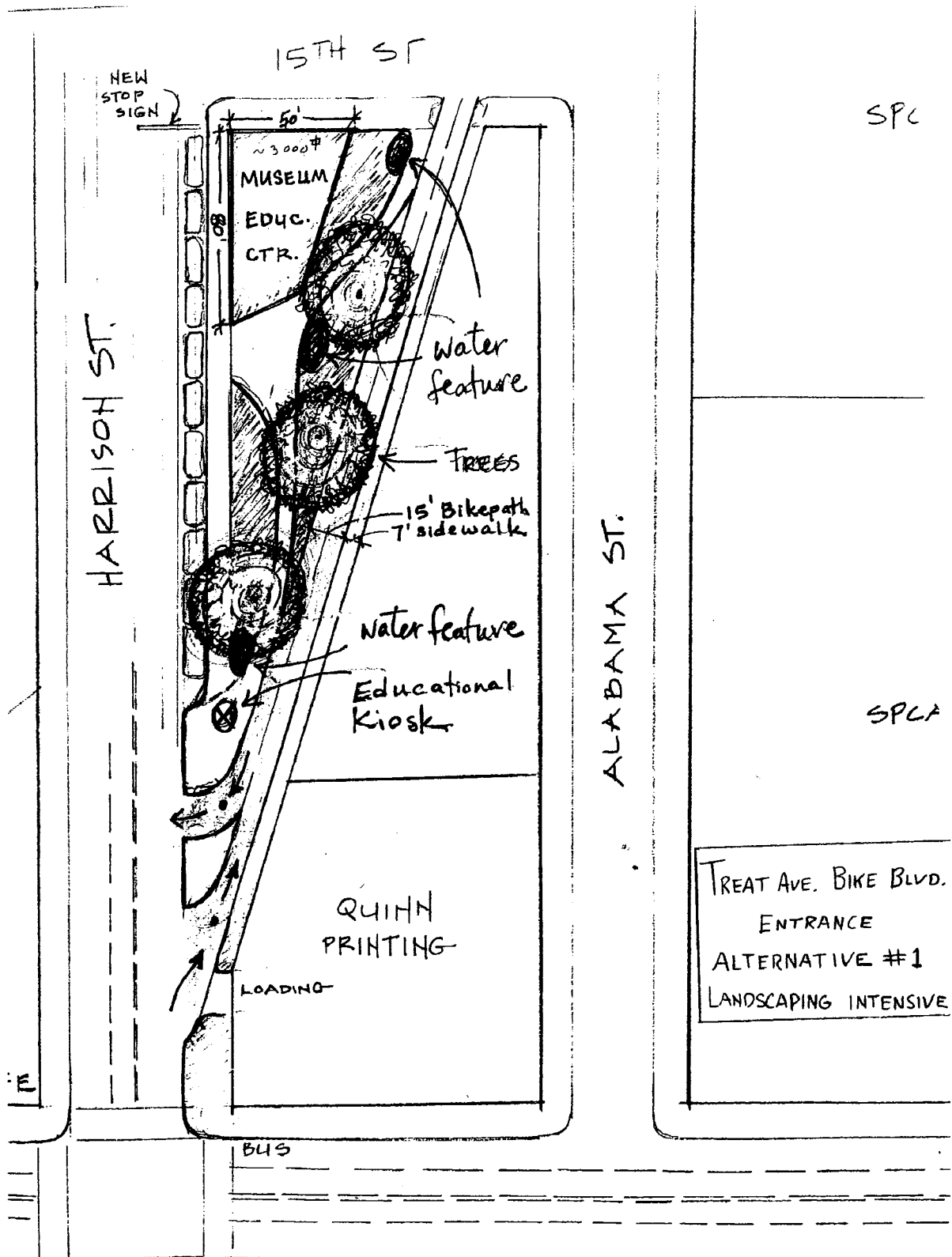


Exhibit 9: Treat Ave. Bike Blvd. Entrance Alternative #1 w/ landscaping

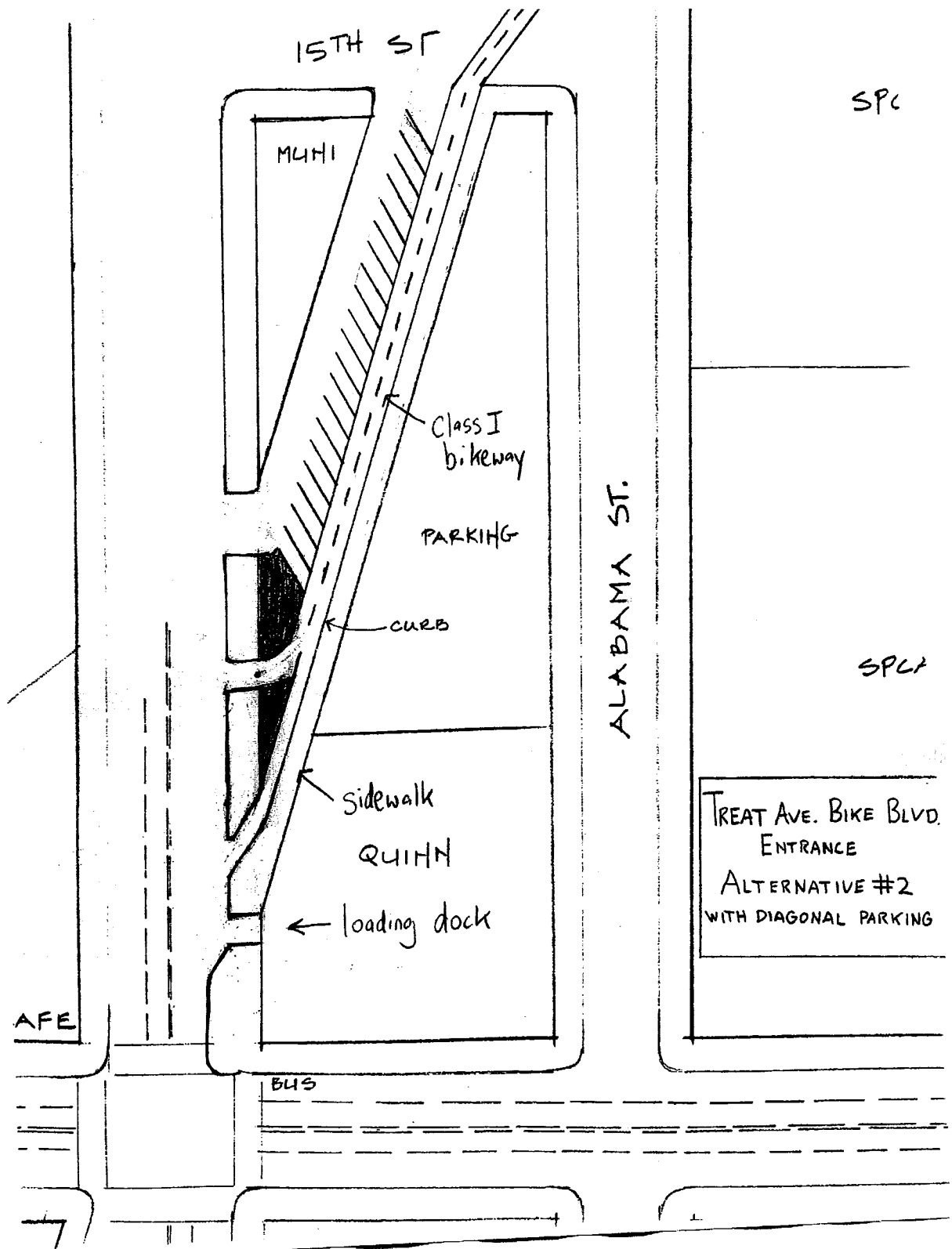


Exhibit 10: Treat Ave. Bike Blvd. Entrance Alternative #2 with parking

The Treat Avenue bicycle boulevard section could be implemented in phases, starting with Alternative #2 in the near term while seeking funding for landscaping improvements and locations for parking replacement in the longer term.

Treat Ave. would be closed to through traffic just north of 15<sup>th</sup> Street between the AC&C and MUNI buildings, with a turnaround area for cars and trucks located between AC&C and SPCA. This would be accomplished with a line of bollards, with one in the middle being of a type that can be removed or retracted to ensure emergency vehicle access. The design will ensure that neighboring businesses will continue to have unfettered access to loading docks, parking lots and other vehicle entrances while minimizing conflicts with non-motorized traffic by reducing the use of Treat as a high-speed short cut for autos.

Florida St. could either be closed at Treat Ave. using a similar design to the Alabama St. closure, or traffic calmed using bollards and bulb-outs to maintain motor vehicle access.

## Division Street Bikeway



*Division St. looking east*



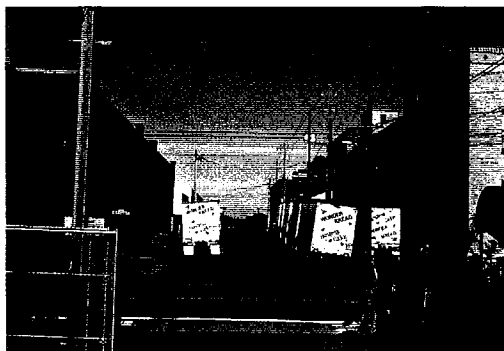
*Byer Parking lot on the former rail corridor*

The section of Division Street under the elevated Central Freeway between Bryant and Potrero features the most hostile present conditions for both bicyclists and pedestrians along the analyzed route. The minimal sidewalk width interrupted by frequent freeway columns, lack of bicycle lanes, heavy traffic, and noise from the freeway overhead all contribute to a poor environment for non-motorized traffic.

Adding to the poor conditions, Division “divides” two different street grid systems. Five roadways intersect at three different locations on Division, including the intersections at Bryant and Potrero, which the MCB must negotiate. Yet the confluence of roads at Division is also what is most valuable about the corridor for both autos and bicycles, providing access to numerous streets in the SOMA and Northeast Mission Districts. In addition, the presence of rail activity along Division for over 120 years facilitated the removal of many barriers and potential conflicts with automobiles that would ordinarily exist in such a dense urban setting. As an example, many streets that abut Division have already been closed or vacated and sold to adjacent landowners, such as York, Hampshire, and Utah.



The success of this section (and the entire project) will depend on the ability to acquire certain parcels from Byer Properties (see Land Acquisition Strategies, page 38). However, if acquiring private land along Division St. proves difficult or impossible, there are alternatives.



*Alameda St. at Bryant looking east*

**Alternative to Division Street:** This option would use Alameda Street, one block to the south, as a detour between Bryant and San Bruno that would avoid the busy intersections and constrained widths along Division. Yet problems exist with this route as well. Alameda is out of the way, passes behind numerous industrial properties with heavy truck activity, and would not follow the historical route of either the Mission Creek or the rail line that ran along it. In addition, Alameda St. would not provide access between the street grids of South of Market and the Mission District, an invaluable characteristic of Division Street.

This option may work as an interim solution if negotiations with Byer Properties take longer than anticipated, and other sections of the project are ready to be implemented. However, the acquisition of key parcels along Division St. must remain a central focus of the project, to ensure a safe, direct, aesthetically pleasing facility.

## Bryant Street Crossing



*Photo of Treat Ave. (on the left) intersecting Bryant St. (in foreground). Division and the Central Freeway are on the right.*



*Blind corner (Division at Bryant)  
Right turn arrow signal proposed.*

Bryant St. is a relatively high capacity arterial street with blind corners at Division and Treat, and thus care should be taken in designing a safe crossing for the Mission Creek Bikeway. A MUNI bus stop is currently located in front of the Byer retail outlet pictured above. After reviewing a number of options for this intersection, the planning team feels that two different designs should be analyzed for feasibility in phase II final design.

**Bryant St. Crossing Alternative #1:** This option would route trail users across a separate, newly signalized intersection at Treat Avenue, where they would cross at a designated signal phase (see Exhibit 11 on next page).

The advantages of this alternative include: designing the bikeway to accommodate predicted use along the most direct alignment; enabling bikeway users to wait for a green light at a less congested (and polluted) location; and maintaining good sight lines. Disadvantages include: greater cost to install new signal heads; concerns about cars possibly disobeying the right turn red arrow on Division at Bryant; and possible driver confusion about two signalized intersections in such close proximity.

**Bryant St. Crossing Alternative #2:** This option would route trail users to the intersection at Division and Bryant where they would utilize the existing crosswalk within a designated phase (see Exhibit 12).

The advantages of this alternative include: consolidating bicycle/ pedestrian movements into one alignment; making use of an existing signal and intersection; and improved sight lines at the intersection itself. Disadvantages include: forcing bicyclists to make a left turn onto a sidewalk just prior to a blind spot created by the Byer building; making bike and pedestrian traffic cross Bryant at a blind spot created by a freeway column just west of the intersection; and detouring from the most direct route across Bryant Street, which many cyclists and pedestrians will, and do, use anyway.

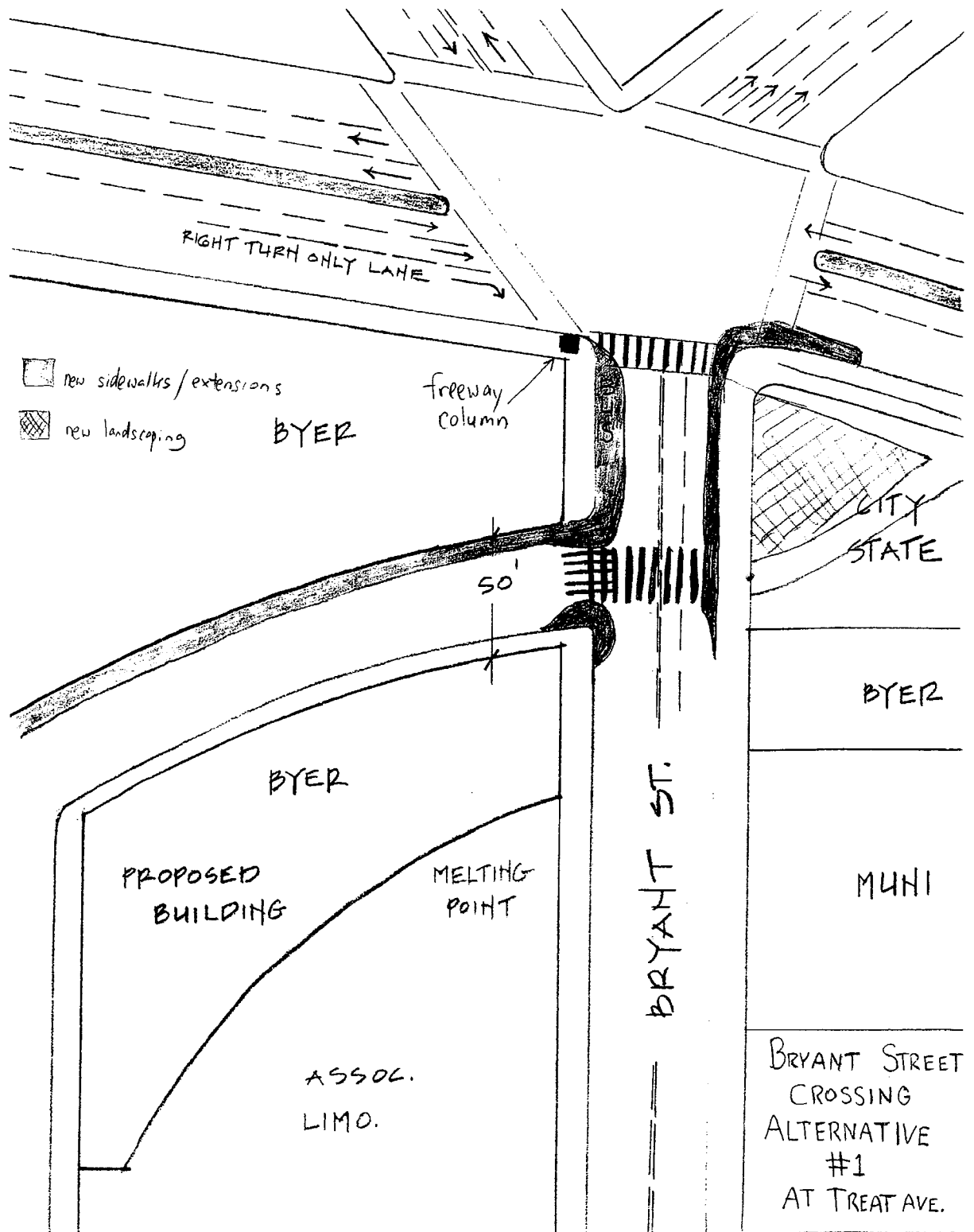
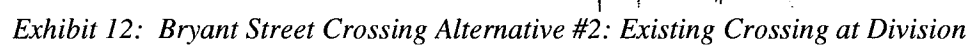


Exhibit 11: Bryant Street Crossing Alternative #1: Crossing at Treat Ave.



**For either or both alternatives the following improvements would be made:**

- The MUNI stop on Bryant between Division and Treat would be relocated south of Treat to allow the sidewalk along the east side of Bryant to be widened in “bulb out” fashion.
- A new right turn arrow signal would be installed facing eastbound traffic in the right turn pocket on Division at Bryant to prohibit right turning traffic when the bike/ped crossing has a green light.
- Crosswalks would be widened and painted “zebra style” for maximum visibility

**Additional improvements with Alternative #1 would include:**

- New signal posts and signal heads would be installed on the northwest and southeast corner of the Bryant and Treat intersection, phased with signals at Bryant and Division.
- A wide area would be striped “zebra style” across the entire intersection
- A wide curb cut would be installed on the east side of the intersection

**Additional improvements with Alternative #2 would include:**

- New bicycle/ pedestrian signals would be installed on the southeast and southwest corner of Bryant and Division to clearly indicate when it is safe for users of the bikeway/ greenbelt to cross Bryant from the corner.

DPT Bicycle Program and Parisi Associates engineering staff analyzed the effects of providing a dedicated phase for trail users on automobile level of service during peak hours, and the result was an increased delay of 21 seconds, shifting LOS at this intersection from E to F. Not providing a dedicated phase for trail users would allow LOS to remain at E. However, safety would suffer, as cars making a right turn would conflict with bicyclists and pedestrians. An “early release phase” was analyzed, in which trail users would receive a green signal in advance of eastbound traffic on Division, allowing bicyclists and pedestrians waiting at the corner to enter the intersection prior to autos. Using an early release phase in place of a dedicated phase would maintain auto LOS at level E, but would endanger trail users due to conflicts between cars turning right from Division onto Bryant, exacerbated by the blind spot created by the freeway column.

After people cross Bryant, a triangular parcel owned by the City and Caltrans (currently leased to Byer Properties) provides land for a pathway with minimal landscaping up to a point halfway between Bryant and Potrero. After this point, land would need to be acquired or traded to continue the path eastward. (See Land Acquisition Strategies page 38)

## Section Beneath Central Freeway Between Bryant and Potrero

This section is constrained between the freeway columns in the sidewalk and the existing buildings to the south. Further compounding these constraints are two automatic gates and driveways from parking and loading areas for Hostess and Byer operations onto Division Street, crossing the proposed alignment of the bikeway.

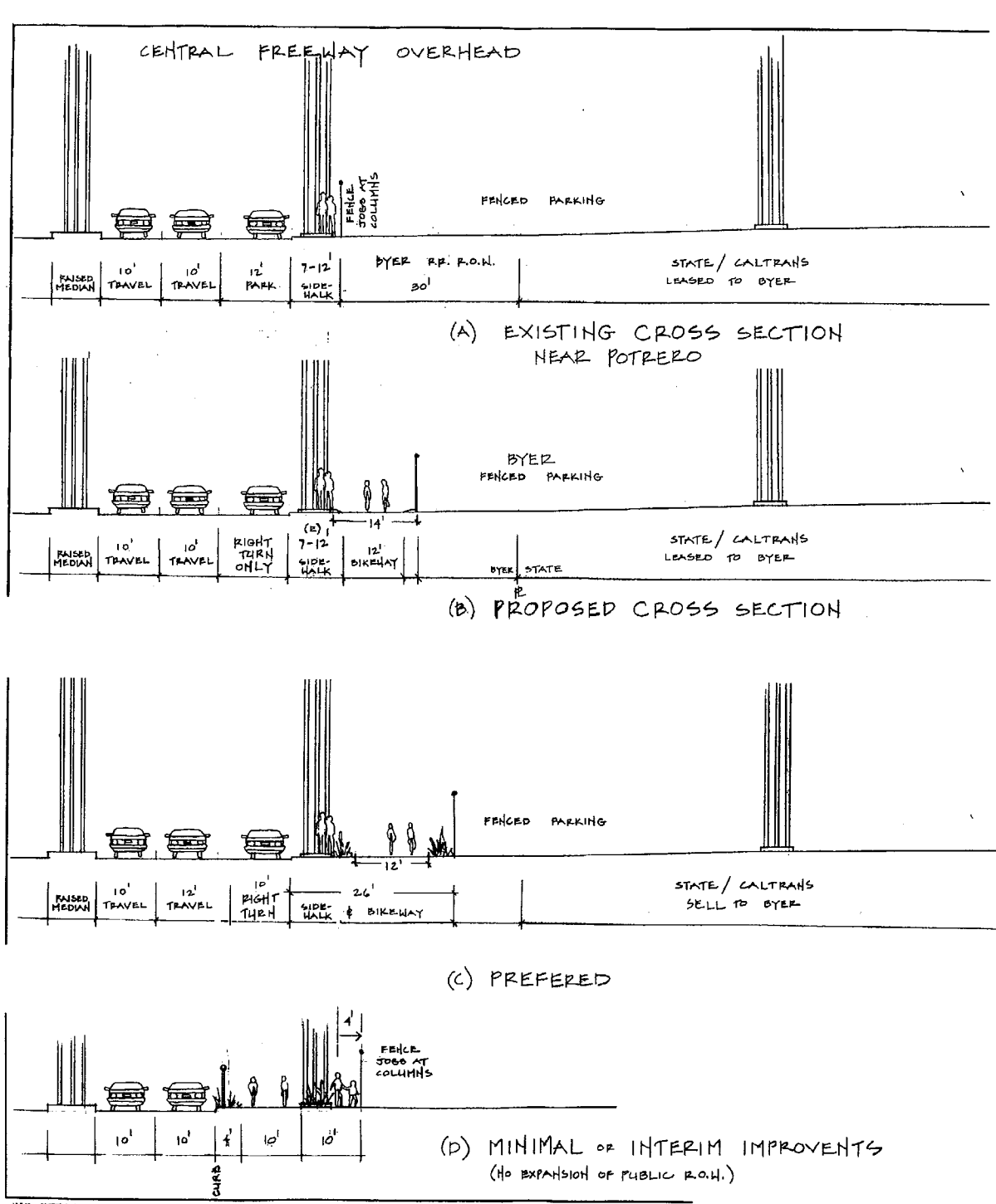
**The preferred solution to accommodate a bikeway through this area has two elements:**

- 1. Acquire or trade at least 14 feet of the Byer's parking lot.** If this is impossible, street parking space could be utilized for some sections.
- 2. Move the truck loading and parking entrances to Bryant Street and Potrero Ave. in order to eliminate conflicts on this block altogether.** If this proves infeasible, a warning system could alert trail users with a flashing red or yellow light that would be connected to the automatic gates. It would be designed so that when trucks were about to enter or exit the parking lot, bike/ ped traffic would be notified.

The most constrained location occurs mid-block, where a freeway column, a throughway between two parking lots, and a wall pinch the available right-of-way down significantly. Either the path would have to be built within these constraints, maintaining existing vehicle access between the two parking lots or vehicle access would be eliminated, allowing the bikeway to remain at a standard width. Most likely, the path would have to narrow at this location regardless, as a wider right-of-way would conflict with loading docks located just south of the constrained area. Another driveway just west of Potrero crosses the path but without the same space constraints. Alternatives are shown in Exhibit 13 on the following page.



*Truck loading, freeway columns, and driveways make this section of Division a challenge to accommodate a standard width bikeway.*



*Exhibit 13: Cross sections of Division St. between Bryant and Potrero beneath Central Freeway- various alternatives are depicted*

## Potrero Avenue Crossing



*Division just west of Potrero-  
right turn only lane proposed here*



*Division and Potrero looking SE: The construction of a  
new pedestrian island is underway to the left.*

The intersection of Potrero, Division, 10<sup>th</sup>, and Brannan Streets involves coordination of 22 separate lanes of traffic. Understandably, this location is notoriously difficult for both automobiles and non-motorized traffic in its present state. Crossing this major arterial intersection, along the south side of Division, involves crossing seven lanes of traffic. However, the proposed new traffic signals and refuge islands will facilitate bicyclist and pedestrian movements.

A modification to the signal's phasing to prohibit right and left turns from Division onto Potrero while trail users have a green light is essential to improve safety, yet would result in automobile LOS F using current analysis techniques. The construction of a bicycle/pedestrian over-crossing would be costly and space-intensive, yet would greatly improve safety at this complex intersection. This concept plan does not include feasibility information on such a structure.

At Potrero, a design similar to Bryant St. Crossing Alternative #2 would be implemented with an expanded bulb-out of the sidewalk, and a new right turn only lane added by removing the 12-foot parking lane along the south side of Division (see Exhibit 14, next page). A dedicated signal phase for bicyclists and pedestrians would be implemented, using new bicycle and pedestrian signal heads, and a new right turn arrow signal installed facing eastbound traffic on Division.

A new pedestrian island is currently being constructed under the supervision of DPT to improve the safety of pedestrians crossing Potrero (See Appendix D for design specifications). This island would be modified to accommodate bicyclists and extended south as part of implementation of the MCB. In addition, the island to the east would be improved to provide an additional refuge for bicyclists and pedestrians. DPT Bicycle Program and Parisi Associates engineering staff report that adding a dedicated phase for trail traffic would improve safety for bicyclists and pedestrians yet reduce PM peak hour automobile LOS from D to F with a delay of 82 seconds.



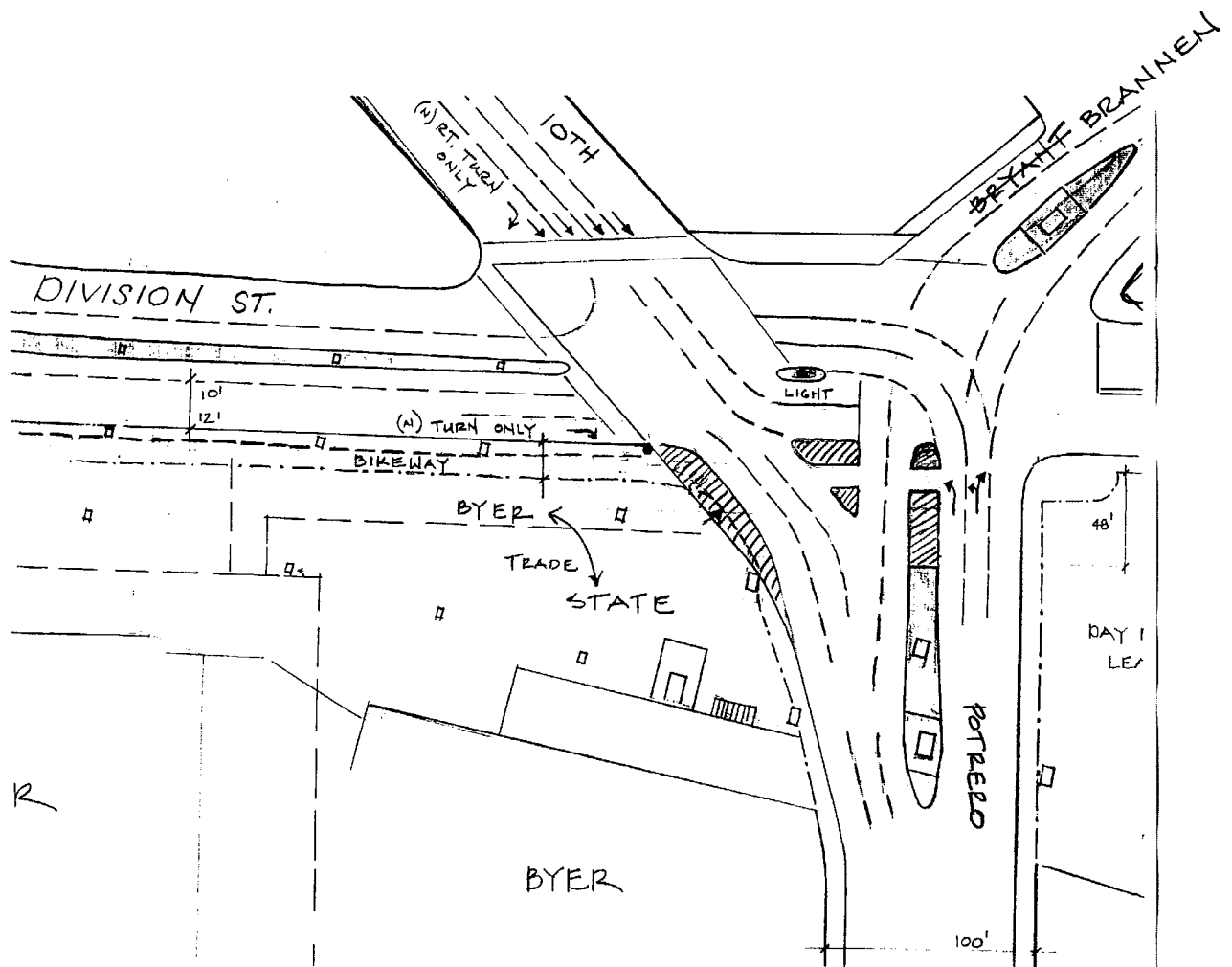


Exhibit 14: Potrero Ave. Intersection Diagram

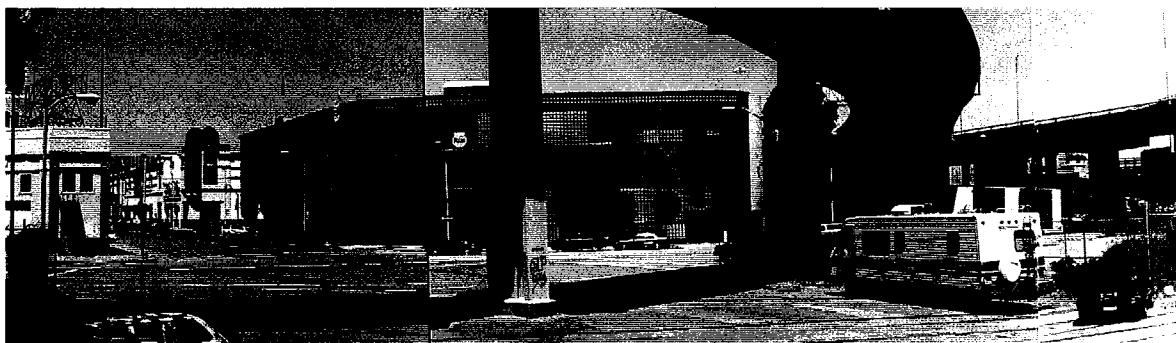
**The following improvements are proposed for the Potrero Ave. Crossing:**

- Curb bulb-outs along the southwestern corner of Potrero and Division
- Remove parking on eastbound side of Division prior to intersection in order to install right-turn only lane
- Add right turn signal head on eastbound Division, coordinated with bike/ ped signals
- Add new bicycle/ pedestrian signal heads
- Enlarge island in center of Division St. to maximum extent feasible
- Enlarge two islands along trail crossing alignment to maximum extent feasible, providing an at-grade crossing of minimum 12 feet, protected by curbs
- Stripe high-visibility zebra-style crossing in three segments, connecting the two islands along the south side of Division, crossing Potrero

It is also recommended that further study of the Potrero Crossing be conducted, in order to identify how traffic could be simplified. Currently, there is excess street space in this intersection, adding to driver confusion and unpredictable traffic movements. Reducing the number of vehicle lanes entering from 10<sup>th</sup> Street by creating a right turn only lane is one possibility that should be examined. A comprehensive analysis of this intersection is clearly needed, yet this analysis is not within the scope of this concept plan.

The planning team recommends that such an analysis take place within the phase II final design for the Mission Creek Project, or independently as part of DPT's routine safety improvement studies.

## San Bruno Street Vacation



*Under the MCB proposal, San Bruno Street would be vacated and used to trade for other key parcels. The Dolby Labs building is visible across Division.*

The MCB would continue eastward using acquired Byer property adjacent to the public right-of-way between Potrero and San Bruno. The plan proposes vacating San Bruno between Alameda and Division, essentially abandoning this block as a public thoroughfare. Such an action would have multiple benefits (see Land Acquisition Strategies). The street vacation could be part of a land trade between the City and Byer Properties to replace lost parking due to implementation of the bikeway. It will also simplify the flow of traffic and reduce the number of streets that the bikeway will have to cross, improving safety.

## 8<sup>th</sup> & Townsend Circle



*Townsend Circle looking east*



*SF Critical Mass visits 8<sup>th</sup> and Townsend Circle; Design Ctr. is visible in background.*

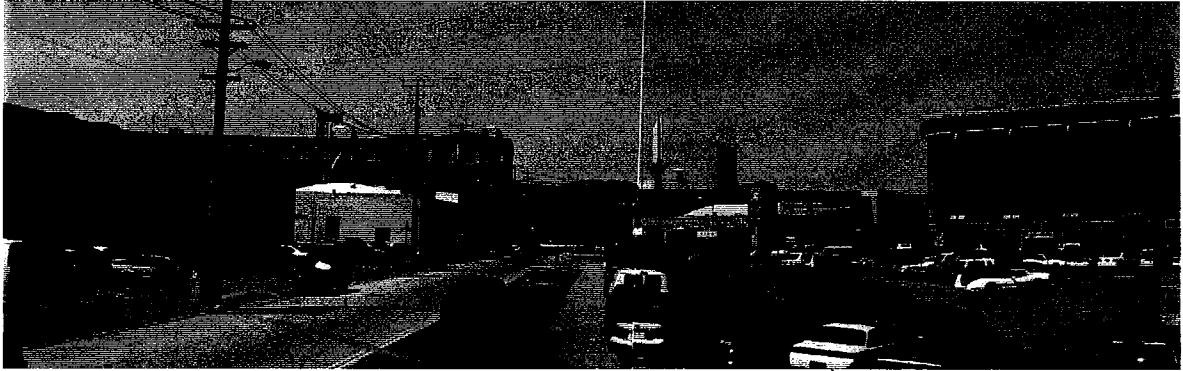
After San Bruno, the trail would be routed onto Caltrans-owned property between San Bruno and Vermont, where a pocket park is also proposed. At Vermont, the Class I facility would transition to Class II bike lanes, with eastbound cyclists entering the roadway at the southwest corner of Vermont and Division via a new bulb-out, and pedestrians remaining on the sidewalk. Westbound cyclists leaving the circle would enter a new left turn only bike lane on Division and yield to eastbound traffic before turning left into the bikeway entrance. Motor vehicles would be prohibited from turning left from Division onto Vermont.

An additional pocket park is proposed for the southeast corner of Division and Vermont, which will not provide any specific transportation-related improvement to the area, but will add to the general aesthetic in keeping with the Mission Creek theme. The Bay West Group that controls the lot has offered to contribute some landscaping work and maintenance of this triangle to the project. This also may be one location for artwork and/or a water feature (fountain or pond). Here, there is a distinct feeling of arriving into an open area after being in the shadow of the Central Freeway for several blocks.

The design team agreed early on that bicycles would have to merge with motor vehicle traffic through the circle in order to minimize conflicts with motor vehicles. This is an acceptable route given the slow speeds that characterize traffic around the circle. Pedestrians would follow the existing sidewalks, crossing first Kansas and then Division on the east side of the circle. The center of the circle, which now features a lawn and a statue maintained by the Design Center, could be enhanced with new landscaping and possibly a water feature. On a historical note, the 8<sup>th</sup> and Townsend traffic circle marks the location of a prehistoric island in the middle of Mission Creek just before it emptied into Mission Bay. (See Exhibit 3: 1869 Map, page 4).

Two alternatives present themselves east of the 8<sup>th</sup> and Townsend Circle.

## Division East of Circle



*Photo taken from King, De Haro, and Division looking west toward 8<sup>th</sup> and Townsend Circle*

**Division East of Circle Alternative #1:** This option would create a Class I bikeway starting on the east side of the circle, with a bicycle only entrance featuring a bulb-out with a curb cut and bollards to keep motor vehicles out (See Exhibit 15, following page).

Alternative #1 proposes a design that is common in urban areas in the Netherlands, where separate sidewalks and bikeways are built parallel to the street, and are separated by grade and bollards. Such an “Amsterdam-style” Class I bikeway is proposed along the north side of Division adjacent to and/or utilizing a portion of the 20-foot sidewalk, planned as part of the 675 Townsend development, which will feature street level retail with housing above. This design would necessitate removal of on street parking on the north side of Division between the circle and King St. in order to install a bikeway parallel to the sidewalk. It would also require limiting access to King St. using a line of bollards to eliminate conflicts with vehicles at this intersection. The sidewalk would be separated from the bikeway with a small curb, as well as a line of bollards to clarify rights-of-way to be used by bicyclists and pedestrians.

A special design would be required to maintain the existing MUNI stop on the north side of Division, possibly narrowing both bikeway and sidewalk in this area and providing a pedestrian refuge to the south in which to locate the bus shelter. If this proves infeasible, it may require moving the bus stop to a different location altogether.

The proposed design along this section of Division is not standard in the U.S. and would require approval from the SF DPT. Conflicts may arise at the circle between eastbound bicyclists entering the Class I route and westbound drivers entering the traffic circle from Division. If this design is ultimately selected, it is imperative that careful planning of the entrance to the bikeway be conducted to minimize conflicts with motor vehicles, and encourage predictable behavior from all roadway users.

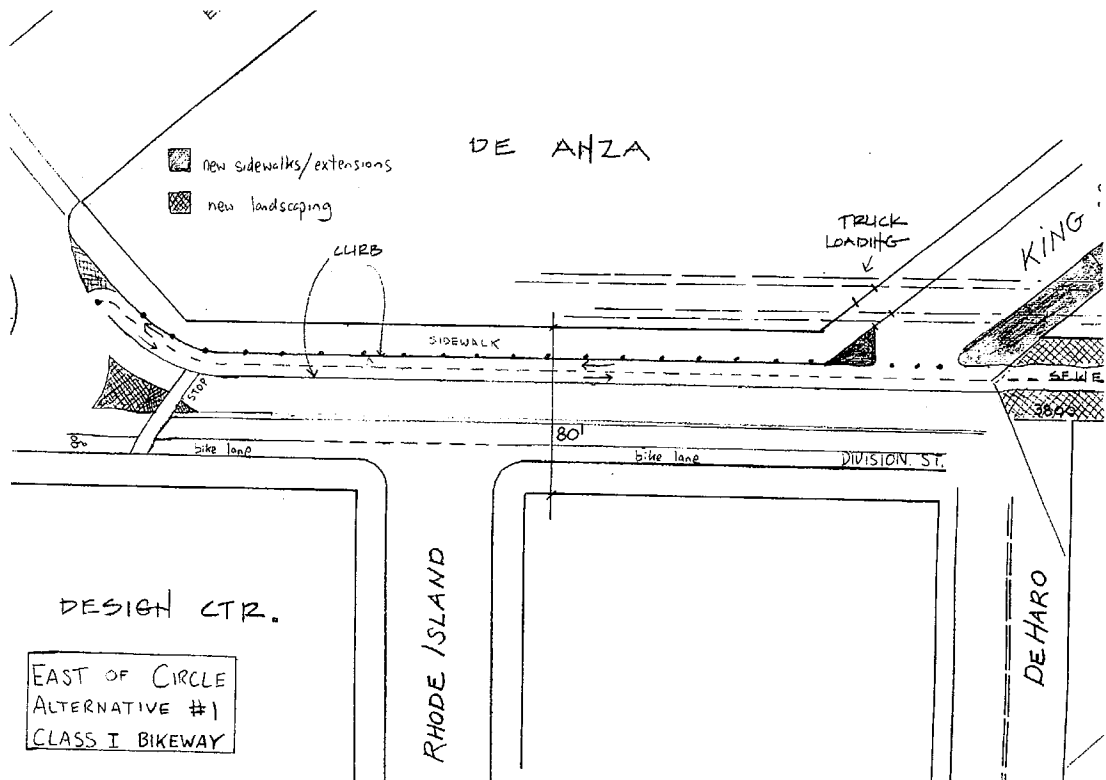


Exhibit 15: Alternative #1 - Class I bikeway east of circle

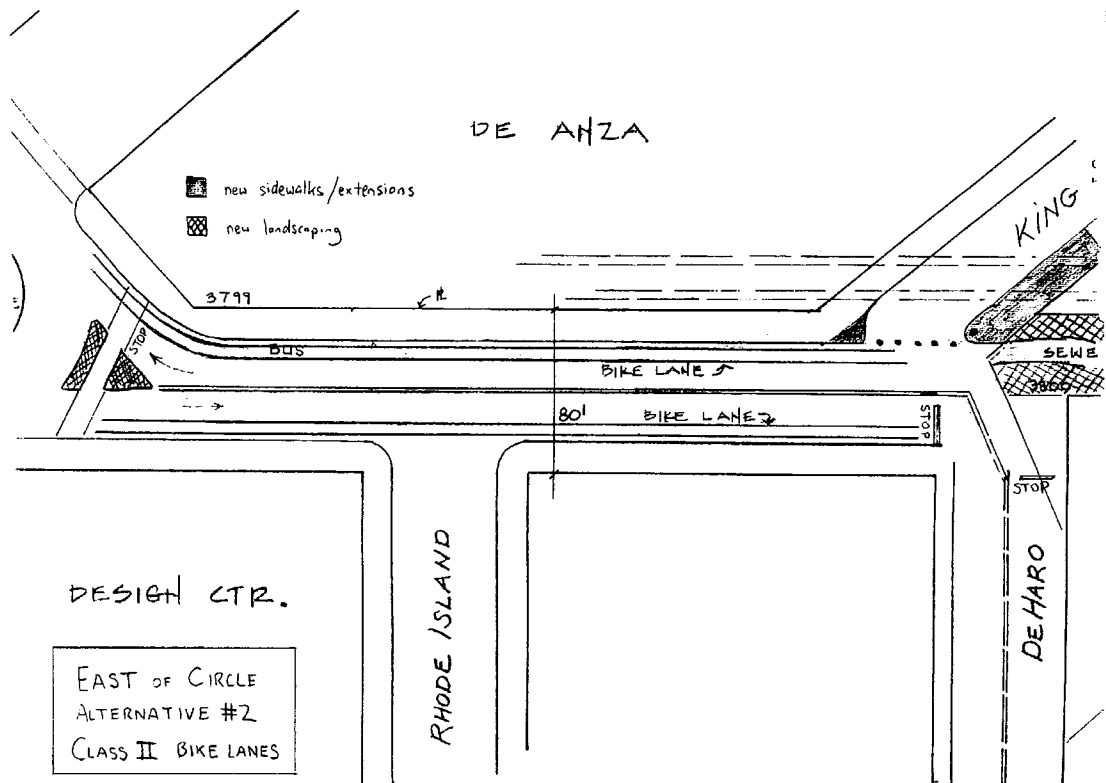


Exhibit 16: Alternative #2 - Class II bike lanes east of circle

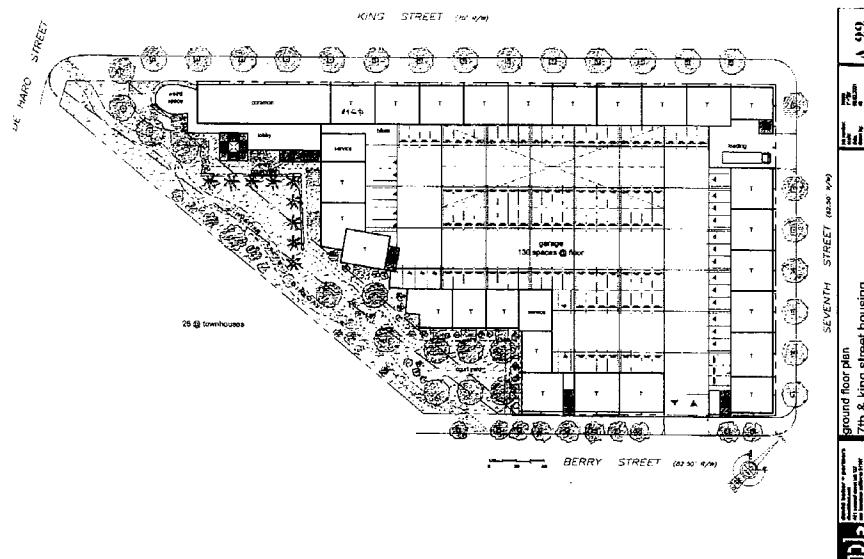
Under this alternative the bikeway would proceed due east, south of a line of bollards that would be retractable/removable by emergency personnel as well as retail tenants of 675 Townsend. Motor vehicles will still have access to this block of King St. via 7<sup>th</sup> Street. The 675 Townsend development plans to install a loading dock on King St. near Division, but it appears that this entrance will not conflict with the trail. However, due to the proximity of the loading dock to the trail, there are still issues to be worked out with the developer regarding turning radii and large truck access (Refer to Appendix I: 675 Townsend Ground Floor Plan).

**Division East of Circle Alternative #2:** This option shown in Exhibit 16 would install bike lanes along this block to connect with the Class I through the 601 King St. development. Stop signs would be installed at the corner of Division and De Haro.

Alternative #2 would place bicyclists within on-street bike lanes for this block. This alternative would simplify traffic movements on the east side of the Circle; yet create potential conflicts for eastbound cyclists at De Haro.

Because the 675 Townsend project will be under construction shortly, an opportunity exists to include construction of the bikeway as part of the developers sidewalk work. **DPT should finalize the design review process in time to include this in De Anza's construction schedule.**

After crossing King St. the bikeway will continue along the sewer easement as part of the 601 King St. development, which is being designed, constructed, and maintained by the developer: AF Evans (See Exhibit 17 below)



*Exhibit 17: 601 King St. Development Ground Floor Plan (with bikeway included)*

## Crossing to Mission Bay



*Corner of 7<sup>th</sup> St. and Berry looking east toward Mission Bay/ Commons Crossing*



*7<sup>th</sup> St.—601 King Development will replace building in center of photo*

The crossing of Seventh Street and the Caltrain tracks is crucial to a continuous corridor connecting to the Mission Bay Development. Because space limitations prevent the addition of bike lanes as part of the Commons Crossing, California PUC regulations allow no new at-grade crossings of active rail lines, and because of the heavy volume of rail traffic through the area, there is a clear need for a bicycle/ pedestrian bridge to Mission Bay from Berry Street. Such a structure is likely to cost several million dollars. In the near term, the bikeway could be detoured to the planned Commons grade crossing along the west side of 7<sup>th</sup> Street. Such a detour should be considered temporary; a grade-separated structure is the only solution that would provide direct bicycle/ pedestrian access to the Mission Bay development from neighborhoods to the south and west.

**Mission Bay Crossing Alternative #1:** This option proposes a bicycle and pedestrian overpass from Berry St. to Mission Creek Channel (See Exhibit 18 on next page).

Assuming the AF Evans housing project is approved with the greenway element intact, the route will exit onto Berry Street. Under Alternative #1 below (the preferred alternative), this would be the site of a proposed bicycle/pedestrian bridge that would cross 7<sup>th</sup> St. and the Caltrain tracks. The bridge would curve 90 degrees to the southeast, and land along the southwest tip of the Mission Creek channel, connecting directly to the planned Mission Creek Park Bikeway.

**Mission Bay Crossing Alternative #2:** This option proposes using a Class I facility along 7<sup>th</sup> Street through the Commons Crossing (Also on Exhibit 18).

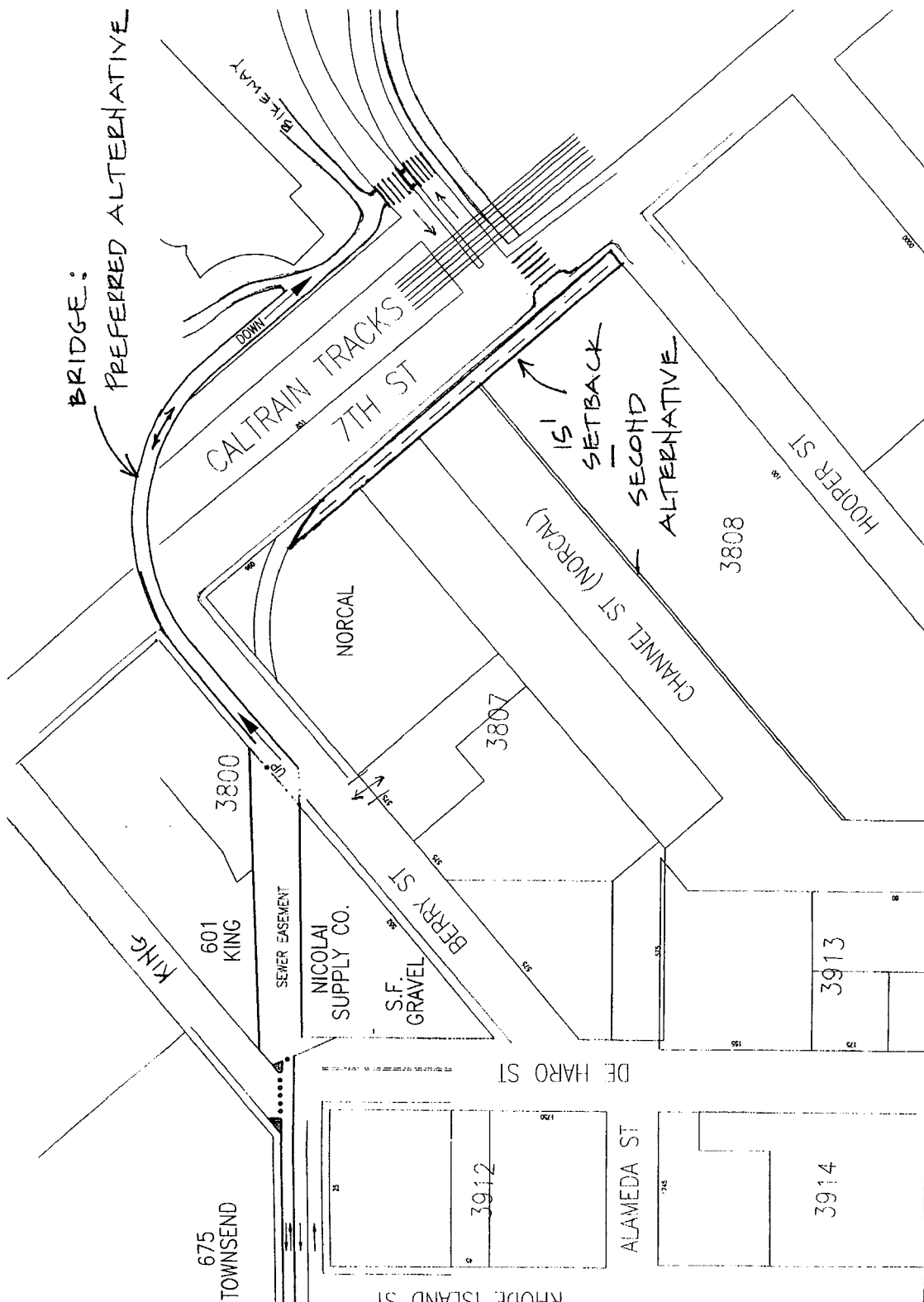


Exhibit 18: Crossing to Mission Bay Alternatives #1: bridge and Alternative #2: bikeway along 7<sup>th</sup> St. to Commons Crossing



Without one of these project alternatives, bicyclists would make a left onto Berry and proceed southeast on 7<sup>th</sup> Street for one block to connect with the new Commons Grade Crossing into Mission Bay. Cyclists could make a left turn along with motor vehicles, and stay in the left lane to connect with the proposed left turn pocket (discussed below) or make a “pedestrian-style” left turn using the crosswalk across Seventh St.



*The proposed bridge to Mission Bay might look much like the Sierra Gateway Bridge along the El Dorado Trail east of Placerville, shown above.*

Two improvements to current construction plans within Mission Bay would facilitate non-motorized connections through this section:

1. The planned pedestrian sidewalk across the tracks at Commons should be widened to a minimum of 12 feet to create a multi-use pathway. Because there are no bike lanes planned for the Commons crossing, many bicyclists would prefer to use a pathway to avoid conflicts with motor vehicle traffic along this busy stretch of roadway.
2. More experienced cyclists who prefer to use the roadway should be accommodated by providing a left turn pocket to connect with the beginning of the bike path along the channel.

There are parallel bicycle and pedestrian pathways planned along the south shore of the Channel through Mission Creek Park as part of the Mission Bay Redevelopment Plan. As of May 2002, Catellus' plans call for both to remain unpaved crushed stone paths. The fact that the bicycle pathway is planned to remain unpaved is a concern for the Mission Creek Bikeway planning team. During our public outreach sessions, many people expressed a desire for a continuous bicycle commuter route. Crushed stone is an inadvisable surface for bicycle commuting, because it is slower than asphalt or concrete, and can be impassable during periods of inclement weather.

After proceeding northeast along the pathways, a planned pedestrian bridge will allow crossing to the west end of the channel and the new park. The planning team recommends that changes be made to this structure's design to accommodate mixed use by bicyclists and pedestrians. At this point, trail users with destinations in Mission Bay will continue on the south side, while those with destinations south of Market, including Caltrain, Pac Bell Park, and the Embarcadero Promenade, can cross the bridge. This will avoid having to cross the Third or Fourth St. bridges that include neither bike lanes nor paths.

Modifications to the bikeway plans inside Mission Bay are beyond the scope of this planning study. **However, access into and out of Mission Bay in the vicinity of the Commons Crossing remains a priority issue for MCB stakeholders, because without well-planned connections the utility of the whole corridor will suffer.** Clearly there are additional bicycle pedestrian planning and safety issues that need to be addressed inside the redevelopment area.



*A rare respite from traffic and asphalt along the former Mission Creek--this existing pathway and park along the south side of Mission Creek Channel will be restored and rebuilt by Catellus as part of the Mission Bay Redevelopment effort. Note the houseboats to the left.*

## 4. LAND ACQUISITION STRATEGIES

**A significant amount of land must be acquired from Byer Properties along Division Street before the Mission Creek Bikeway (MCB) plan can be fully implemented. Fortunately, sufficient publicly owned land exists along the former Mission Creek rail line to compensate (through trade or match) for these acquisitions.**

The overriding land use strategy for the Mission Creek Bikeway project is to take primary advantage of the existing, publicly-owned former rail corridor along Division Street and expand the public ROW for an off-street section of Class I bikeway in the most crucial and bicycle-unfriendly stretches. Most of the existing vehicular roadway along the route is flanked by SF City or Caltrans property; some of which is proposed to be included in the project (See Exhibit 19 on the next page). Many of the critical elements of the MCB project involve intersection improvements, which do not require land acquisition.

The land acquisition and right-of-way expansion strategy proposed in this analysis assumes that some public land along the corridor, under the control of City and State transportation agencies (DPT/DPW & Caltrans), will be contributed to the project, and that these public lands will be used as “trade” for lot line adjustments to adjacent landowners. No “out-of-pocket” acquisition costs for land will be required if properties are exchanged at fair market value. However, some of these publicly owned properties generate significant revenue for agencies (such as Caltrans) that lease the land for parking purposes. There may be significant lost revenue as a result of transferring ownership of lands or incorporating lands into the MCB project. The actual amount of land that public agencies are willing to contribute will determine the breadth and scope of the project, and/or how the project will be phased and grow over time. Real estate negotiations should commence as soon as possible after public agencies have reviewed the recommendations and prioritized elements of the project given their respective budgets.

The 50-foot wide railroad right-of-way between 16<sup>th</sup> and 7<sup>th</sup> St. provides the backbone for the bikeway and greenbelt. However, the MCB project does not depend on all of the railroad lands (some which is now privately owned) to create a safe and usable bikeway along the historic corridor. Wherever possible, publicly owned land and rights-of-way are utilized for the project. For example, the relatively quiet section of Treat Ave. between Harrison and Bryant can function as a “bicycle boulevard” with traffic calming and landscaping of the existing public roadway, instead of attempting to purchase additional lands adjacent to Treat Ave.

The busiest and least friendly section for bicyclists today is between Bryant and Potrero, where the public ROW could be expanded via lot line adjustments between the City, Caltrans and Byer Properties. Further east, between Potrero and Vermont streets, the MCB would utilize a large parcel owned by Caltrans, as well as a proposed street vacation of the north end of San Bruno. This street vacation would create “new” land available to trade for some of the privately held railroad land along Division.

[illegible]

### ASSIGNED TO SPECIFIC LAND PARCELS

*Exhibit 19: Land ownership map*

In and around the 8<sup>th</sup> & Townsend Circle, the bikeway would be accommodated primarily within the existing public right-of-way, with striped Class II bike lanes west of the circle and either a Class I, grade-separated bikeway or Class II bike lanes east of the Circle. A neighborhood planning and rezoning effort is currently underway for this "Showplace Square" area, where significant changes to the allowable land uses and street configurations between 7<sup>th</sup> and 8<sup>th</sup> Streets are being discussed.

AF Evans, the developer of 601 King Street, a key parcel between King and Berry Streets, has agreed to dedicate private land to the MCB project if the City Planning Commission approves their housing project. This alignment would provide the most direct link from the western sections of the corridor to the Commons Crossing and Mission Bay.

A bridge from Berry St. over 7<sup>th</sup> Street and the Caltrain tracks to Mission Bay still needs further study, but land acquisition does not appear to be a constraint. Alternative #2 may require land acquisition or setbacks on the west side of 7<sup>th</sup> St. between Berry and Hooper.

## Potential Land Contributions by Public Agencies

### City & Co San Francisco:

- Street use of Treat Ave between 16<sup>th</sup> and 15<sup>th</sup> Streets – Main entrance from the southwest
- 15 ft. wide landscaped sidewalk, south side of Treat Ave. between 15<sup>th</sup> & Florida Streets
- Street vacation of San Bruno Ave. between Division & Alameda, as trade for portions of railroad lands along south side of Division
- Small island in Division at corner of 9<sup>th</sup> Street for a pocket park
- Small building owned by HHP&L (SF Water Dept) at entrance for community resource (Block 3926)

### State of California CALTRANS:

(All are leased as parking lots)

- SE corner of Bryant & Division (Block 3904) (this was a city street, controlled by State)
- Lot line adjustments to move State land to be adjacent to Division (Blocks 3905,3906)
- Northern strip between San Bruno & Vermont (Block 3909)
- Portions of parking lots in Blocks 3907 & 3908 may be involved

## Discussion by Project Section

### 1. Treat Ave between 16<sup>th</sup> & Harrison and Bryant & Division

*Summary: Since all land along Treat Avenue is city-owned, no acquisitions would be required. Some transfer of responsibility between City agencies is anticipated.*

The relatively quiet Treat Avenue (between Harrison and Bryant) is City property under the jurisdiction of SF DPW and DPT. It can be improved primarily with traffic calming measures, utilizing the existing public right-of-way. The preferred alternative will encompass the majority of Treat Ave. from 16<sup>th</sup> to 15<sup>th</sup> Streets as the main entry to the

bikeway from the west. The City of SF acquired in 1997 a fifteen-foot wide swath on the south side of Treat on Block 3924 & 3902, in exchange for a “street vacation” of Alameda Street (between Treat and Florida). This serves as a precedent for similar land trades along the corridor.

SF Animal Care & Control (SF AC&C) “took responsibility” for a small section of Treat Ave near 15<sup>th</sup> Street, where they constructed an outdoor park for employees and dogs. We recommend this triangular piece of City property be reconfigured slightly to round off the corner and allow the diagonal “river route” to pass by the SF AC&C, rather than jog around a sharp corner. (APN 3925) The area returned to street use could be replaced by extending the park northward. None of these adjustments would require any acquisition of new land by the City, but rather a transfer in responsibility for the properties discussed from one City agency to another.

SF Hetch Hetchy Power & Light (SF PUC/Water Dept) own a small, triangular building between Treat & Harrison, and 16<sup>th</sup> and 15<sup>th</sup> which presents an opportunity to implement a community resource center, since it is located at the west entrance to the Bikeway, where landscaping opportunities also exist. Uses such as a Mission Creek Museum and an adoption center for animals have been proposed. MUNI currently uses the building to store bus tires (APN 3926/04). This would also be a transfer of responsibility between City agencies.

## **2. Trade for railroad lands along Division between Bryant & Vermont**

Involves State parcels in the following City blocks: 3904, 3905, 3906, 3907, 3908 & 3909.

***Summary:** Expand the public right-of-way as much as possible, to create an off-street, Class I bikeway on the south side of Division, through the busiest and most vital section of this historic transportation corridor. Utilize land trades between public and private landowners to eliminate need for new funding.*

The block between Bryant and Potrero is the most crucial segment of the corridor on which to create an off-street bikeway. It is also the most difficult because the adjacent land uses are constrained for space, as described in the Technical Design Analysis section.

The southeast corner of Bryant & Division (north of Block 3904) is publicly owned and currently leased to Byer Properties for parking. This land used to be Division Street before the Central Freeway was built, and as such, the City may have some jurisdiction over it, in addition to Caltrans who currently controls the leases. East of this block the corridor narrows, and State parcels are set back from the street.

Caltrans owns two parcels sandwiched between the old railroad land (now private) and private land owned by Byer Properties in Blocks 3905 & 3906. State lands are leased to these same adjacent landowners. The “land-locked” State parcels could be reconfigured (through lot line adjustments) to allow the City & State public land to be contiguous along the public right-of-way of Division Street. Byer Properties has no incentive to relinquish their railroad land, or their leases of the “land-locked” State property unless the

City or State take the lead in these negotiations, and propose an attractive deal. The parcels should be reconfigured to allow at least a minimum width for an off-street bikeway (14 feet) along Division. A wider strip would allow for some landscaping. Removal of street parking would accommodate most of the required width if negotiations are slow or difficult and an interim solution is required.

East of Potrero, Division Street is more bicycle friendly, but traffic is projected to increase dramatically when Mission Bay is completed. All of the land on the south side of Division, between Potrero and Vermont (Blocks 3907,08,09), both public and private, is currently used for parking. This stretch of the corridor is the most feasible for a Class I facility with landscaping, since space constraints are less severe, and being under the Central Freeway, there are limitations on other potential uses. Byer Properties owns the 50-foot wide railroad corridor, which they lease to one of their commercial tenants, Gold's Gym, for parking. Gold's Gym also leases some of Caltrans property for parking adjacent to the private railroad land. The northernmost portion of Caltrans Lot 1 Block 3909, between San Bruno and Vermont, is currently used for parking, and is proposed for inclusion in the expanded public ROW.

It is recommended that as much of the Byer's former railroad land as possible be included in the project and added to the public right-of-way between Bryant and San Bruno Ave. In exchange for this land, the MCB plan recommends the "street vacation" of one block of San Bruno Ave (contributed by City & County of San Francisco) to be traded to Byer Properties and used for parking. Some additional Caltrans property in Blocks 3907 and 3908 may also be included in this exchange. The street vacation of San Bruno Ave. between Division and Alameda provides a mechanism to compensate Byer Properties for their railroad land, without having to provide new funding for any acquisitions. The area occupied by San Bruno Avenue is larger than the areas proposed for relinquishment by Byer Properties, so we believe the proposal will be attractive. The City and State must step forward and open the discussions and negotiations for these land trades.

A pocket park is proposed to occupy a new bulb-out at the northeast corner of 9<sup>th</sup> and Division. No new land acquisitions are required for this.

### **3. The 8<sup>th</sup> & Townsend Circle and Vicinity**

***Summary:** East of Vermont Street and around the traffic circle, available public land diminishes, and the bikeway moves onto Division Street via new bike lanes and improved sidewalks. Private land has been made available along the sewer easement between King and Berry, assuming the developer's proposed housing project is approved. Other private property along the corridor will augment landscaping plans.*

The AF Evans Company has incorporated the Mission Creek Bikeway project into their designs for a new housing project on the 601 King Street site (See Exhibit 17 on page 33). This will allow bicyclists and pedestrians to pass through their property using the

most direct route to the Mission Bay Commons Crossing and any future non-motorized bridge to the Mission Creek Park pathway, planned along the south side of the channel.

Michael Nicolai of SF Gravel & Nicolai Supply, owns a key parcel (Block 3800 Lots 3 & 4) also covered by the sewer easement. The planning team spoke to him about trading some of his land along the sewer easement (to create a true “public” right-of-way) in exchange for narrowing the public street along one of his frontages. He expressed openness to these ideas but will need a concrete proposal to respond to.

#### **4. Crossing to Mission Bay**

***Summary:** Because the Mission Bay development includes a bikeway along the length of the channel on public parkland, no specific land acquisition is required in this area. Between Berry St. and the channel path, depending on the crossing alternative selected, some limited acquisition may be necessary.*

Once the trail leaves the 601 King St. property, there are three alternatives to allow trail users to cross 7<sup>th</sup> Street and the Caltrain tracks into Mission Bay. The existing conditions require bicyclists and pedestrians to follow 7<sup>th</sup> Street and sidewalks to the Commons Crossing. One alternative would involve acquiring private land along the southwest side of 7<sup>th</sup> Street for a Class I facility between Berry and the Commons Crossing. The preferred alternative includes the construction of a bike/pedestrian bridge over both 7<sup>th</sup> Street and the tracks, which would require land for approaches on either side.

The bridge would require dedicated land at both the east and west approaches, which most likely can be accommodated on the east (Mission Bay) side within existing public land adjacent to the sewage treatment plant. The western landing of the bridge would need to occupy a significant portion of Berry Street. However, Berry Street is unusually wide, and a portion of the street could be dedicated to the western landing of a new bridge without significant operational impacts.



## 5. LANDSCAPING AND CULTURAL RESOURCES

The swath of land preserved by the railroad provides a physical memory of Mission Creek, which today flows in sewer culverts beneath Division Street (see appendix K). There are few remaining indications that a river once flowed here, with a major railroad from San Jose built along its shores. This concept plan proposes to provide both an attractive bicycle/ pedestrian facility, and also frequent reminders of what was lost when the area was industrialized. One of the primary methods to accomplish this goal is the restoration of natural features, including plant and tree species (see Appendix F).

Softening the harsh environment in this industrial area through the creation of open spaces and landscaping will encourage more people to get out of their cars and use the Bikeway for transportation. Open space will also provide appropriate settings to highlight historical and cultural information about the former river and railroad, and how the character of the area has changed during different periods of San Francisco's history.

In this era of increasing concern and awareness of the need to protect our environment, highlighting the river corridor becomes a powerful mechanism to remind people of the water flowing to the Bay beneath our feet, and the need to reduce the toxic pollutants we dump onto our streets through everyday use of the automobile. Educational kiosks are planned along the route, which provide historical references and environmental education messages.

Numerous opportunities for "pocket parks" exist along the route. A string of small green spaces are much easier to fund and maintain than one large city park facility. Two such green spaces have been proposed and adjacent private property owners have indicated a willingness to maintain these and keep them open to the public. One at 9<sup>th</sup> and Division would be on a corner of City property in front of Dolby Labs; the other is at the corner of Vermont and Division, owned by Bay West Group (the Showplace Design Center). The extent of improvements is yet to be determined. Bay West Group already maintains the public landscaping in the center of Townsend circle.

A Caltrans parcel at Division and San Bruno is another good candidate for open space, which would need a responsible entity to maintain it. Another location for landscaping is at the entrance to the Bikeway at Harrison, where an underutilized section of Treat Avenue is proposed to be abandoned for automobiles and improved with a bikeway and pocket park. The San Francisco League of Urban Gardeners (SLUG), part of SF DPW, has expressed interest in participating in the Mission Creek landscaping project.

### Avenida del Rio

Avenida del Rio is the name of the coordinated art & education project envisioned for the Bikeway by the Madrina Group. Funding will be solicited and art projects will be selected with a theme or message for different sites, within the larger river context. For example, the two sites where bridges once crossed the river should contain some reference to those bridges. At the 16<sup>th</sup> and Harrison bridge site is located the SF Animal Shelter with the SPCA

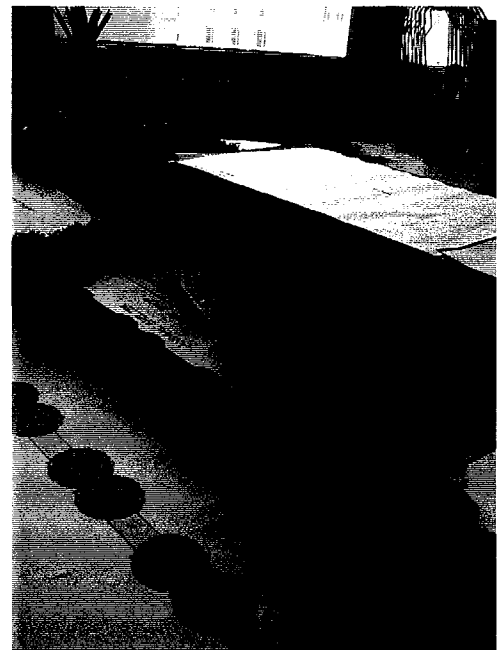
across the street. Individuals from these organizations responded enthusiastically to the “bridge” metaphor, since they see their work together as something of a “bridge” for the animals that find themselves at the Animal Shelter needing a new home.

In 1999 the Madrina Group commissioned a mosaic tile mural depicting Mission Creek, which was installed at the corner of 16<sup>th</sup> and Harrison, where a bridge once crossed the river. (The mosaic mural on the title page was inspired by the drawing in Exhibit 2 on page 3) This piece of public art has brought awareness of the river to thousands of people passing the site, including bicyclists who use the existing SF Bike Routes #33 & 25 along Harrison.

The drawbridge once located where Potrero crossed the river to Brannan is another location where it is hoped that educating the public of the area’s history will have more than aesthetic benefits. With the knowledge that this site has always been a difficult passage, and that a navigable waterway once flowed along Division, it is hoped to help ease the frustration drivers feel with the delays at this massive and confusing intersection.

A Mission Creek Museum is proposed for a small metal building at the entrance to the Bikeway, on the corner of 15<sup>th</sup> St and Treat. The property is owned by SF Hetch Hetchy Power & Light and used currently to store truck tires by MUNI. The SF PUC (of which HHP&L is a part) is preparing a billion dollar capital improvement program to the City’s wastewater system and the MCB Project Team will be requesting this small building be contributed to a water-pollution prevention education program as a part of their capital project.

## UC Berkeley Extension Planting Design Course Fall 2001

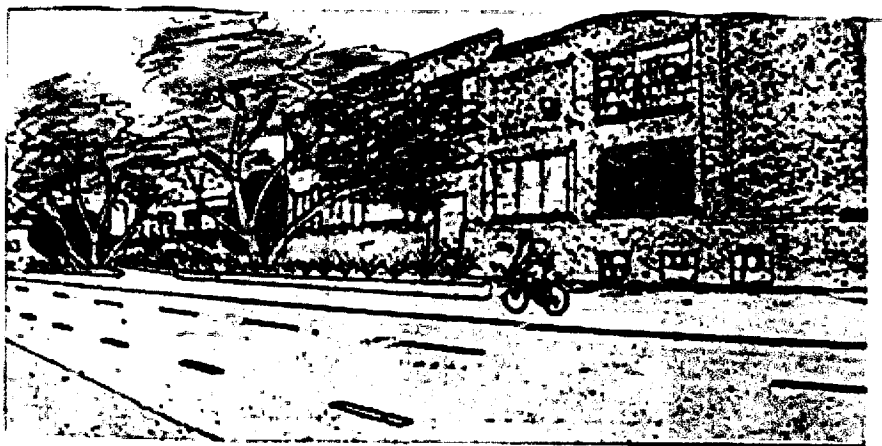


*The University of California at Berkeley Extension Planting Design Class presents their work at Rails-to-Trails Conservancy, including this scale model of Treat Ave. by Claudia Olalla and Lisa Charpontier.*

The MCB planning team was lucky to be able to benefit from the work of Vince Healy's Fall 2001 UCB Extension Planting Design Course. The class was divided into teams and directed to create landscaping plans for the section of the MCB on Treat Avenue between Harrison and Bryant (selections from the class's work are included in Appendix G and on the following pages). Some of the concepts that the students expressed in their designs included:

- A living wall proposed along Treat Ave. designed to border the SPCA parking lot, created from chicken wire, peat moss, and mulch (Marge Tibbetts)
- A landmark tree at Treat and Harrison (Ivor Thomas)
- Outdoor display area for SPCA animal adoption program (Marge Tibbetts)
- Sculpture garden at Treat and Harrison (Janet Pigot)
- Roof gardens and a bridge between SPCA and Animal Control (Sally Schute)
- Creation of "parking groves" where numerous trees planted within parking lots can soften the urban landscape without significantly reducing the amount of parking (Claudia Olalla and Lisa Charpontier)
- A diagonal crossing of 16<sup>th</sup> St. and Harrison to continue the bikeway south (Janet Pigot) See Appendix G.

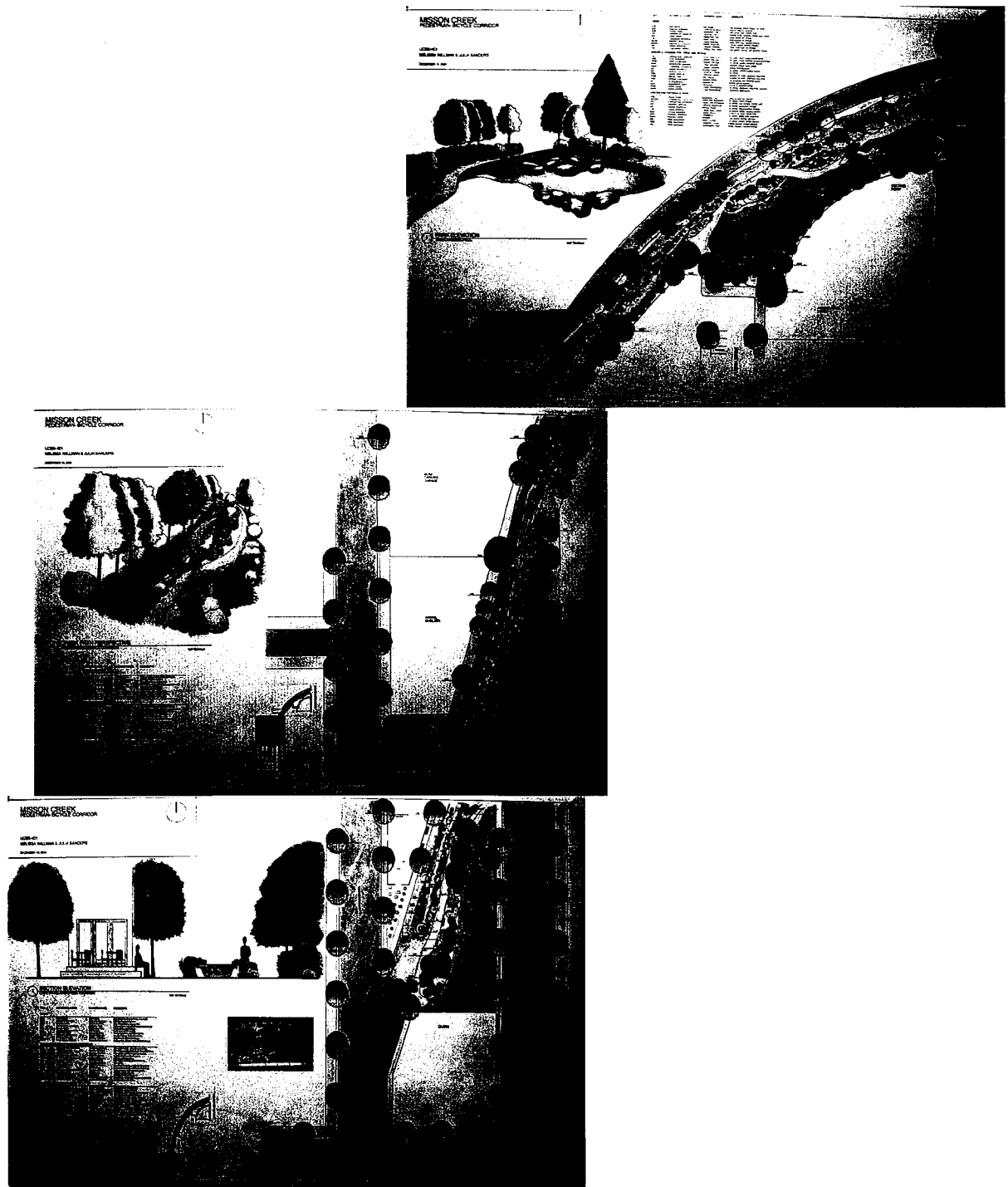
Native species of plants and trees that would be suitable for the local microclimate were selected, and planting designs were presented at the end of the course. Species selections from the class are included in Appendix F.



*Harrison Street Entrance*

*Exhibit 20: Landscape Design Idea for 16<sup>th</sup> and Harrison Bikeway Entrance by Rick Morris*

One of the students from the class, Kap Seidel, was retained to prepare the initial design concept for the project, which includes cross-sections and conceptual drawings. At the time when this plan was prepared, the project team was still seeking to implement a Class I bikeway along the length of Treat, reflected in the Initial Design Concept. Subsequent developments ruled out such a facility along Treat, and the current Class III bicycle boulevard was adopted. This initial design concept is included as Appendix E.



*Exhibit 21: Landscape Design Trilogy (Melissa Willman and Julia Sanders)*

## 6. SCOPE OF PROPOSED WORK

### Treat Avenue Bicycle Boulevard

- Street resurfacing of Treat Ave Between Harrison and Bryant
- Remove railroad tracks and approx. 7000 sq. feet of asphalt between 15<sup>th</sup> & 16<sup>th</sup> Sts.
- Installation of approximately 20 bollards, 2 automatically retractable
- Construction of approx. 250 sq. ft island at Harrison entrance with landscaping
- Modify Animal Care and Control Outdoor Yard by rounding southeast corner and extending their area northward.
- Add approximately 7500 sq. ft of landscaping and 400 feet of sidewalk along east side of Treat, between Alabama and Florida (along the SPCA parking lot)
- Mural paintings on Byer buildings at Bryant and Treat (with owner permission)
- Stripe high visibility ladder style crosswalk across Treat at Bryant

#### **Entrance Alternative #1 landscaping intensive- long term** (Exhibit 9, page 17)

- Install 7000 sq. feet of landscaping on Treat between 15<sup>th</sup> and 16<sup>th</sup> Streets

#### **Entrance Alternative #2 with parking- short term** (Exhibit 10, page 18)

- Provide asphalt paving and 10 new parking spaces with curbs and tree plantings
- Minimal landscaping near bikeway entrance at Harrison
- Add stop sign at parking lot exit

### Division Street Bikeway

- Relocate MUNI stop on Bryant between Division and Treat to south of Treat
- Bulb out sidewalk along the east & west sides of Bryant between Division and Treat
- Install new right turn arrow signal facing eastbound traffic in right turn pocket on Division at Bryant
- Paint 4 “zebra style” high visibility crosswalks at Division and Bryant
- Remove approximately 7500 sq. feet of asphalt and install landscaping along southeast corner of Division and Bryant
- If moving truck entrance on Division to Bryant is not acceptable to Hostess/ Byer, install two warning lights linked to automatic gate along Division
- Install approx. 2800 sq. feet of “bulb-out” at Potrero intersection, including pedestrian islands (Exhibit 14, page 28)
- Stripe new right turn only lane on EB Division @ Potrero
- Install new right turn arrow signal head on EB Division @ Potrero
- Install 4 new bike/ ped signal heads @ Potrero Intersection
- Stripe new zebra-style crosswalks across Potrero
- Construct approx. 80 feet of curb across San Bruno
- Install 2 removable bollards @ Division and San Bruno
- Install 1200 lineal feet of 12’ wide bikeway with 2 ft. shoulders; Bryant to San Bruno
- Construct pocket park at north side of 9<sup>th</sup> and Division (approx. 2500 sq. ft.)

**Bryant St. Crossing Alternative #1- new crossing at Treat** (Exhibit 11, page 22)

- Install new signal posts and signal heads on the northwest and southeast corner of the Bryant and Treat intersection, phased with signals at Bryant and Division.
- Stripe a wide area “zebra style” across the entire intersection
- Install a wide curb-cut on the east side of Bryant south of the intersection

**Bryant St. Crossing Alternative #2 -existing ped crossing of Bryant at Potrero**

- Install new bicycle/ pedestrian signals on the southeast and southwest corner of Bryant and Division.
- Install a curb-cut on the east side of Bryant near the corner

## **8<sup>th</sup> and Townsend Circle**

- Install approx. 15,000 sq. feet of landscaping between San Bruno and Vermont
- Construct bulbout of 300 sq. feet at southeast corner of Vermont at Division
- Stripe high visibility crosswalk across Vermont
- Restripe lane markings on block between circle and Vermont, add wide and colored bike lanes
- Add 5000 sq. feet of landscaping at southwest corner of Vermont and Division
- Stripe high visibility crosswalks all around circle

**Division East of Circle Alternative #1- Class I bikeway** (Exhibit 15, page 32)

- Construct bulbout and “bike sidewalk” east of circle, totaling approx. 4000 sq. feet, along 675 Townsend.
- Install 20 bollards between sidewalk and bikeway, one automatically retractable bollard at King St.

**Division East of Circle Alternative #2- Class II bike lanes** (Exhibit 16, page 32)

- Stripe bike lanes on Division between circle and De Haro
- Add 4 stop signs at De Haro and Division

## **Crossing to Mission Bay**

**Crossing to Mission Bay Alternative #1** (Exhibit 18, page 35)

- Construct bike/ pedestrian bridge meeting ADA standards (approx. 800-1000 ft. long curving 90 degrees) across 7<sup>th</sup> St. and Caltrain Tracks

**Crossing to Mission Bay Alternative #2** (Exhibit 18, page 35)

- Acquire 16 foot strip of land on southwest side of 7<sup>th</sup> St. from Berry to Commons
- Construct approx. 450 feet of bikeway along southeast side of 7<sup>th</sup> St.
- Construct bulbout at crosswalk over 7<sup>th</sup> St. at Commons

## **General Improvements (site not yet determined)**

- 25 new signage installations with traffic safety and/ or directional messages.
- Lighting improvements: 20 new street lights, 50 lighted bollards
- 6 Educational Kiosks
- 10 Public Art installations under a coordinated plan with environmental messages.
- 3 Water Features – fountains or ponds- and associated plumbing

## **7. TRAIL & GREENWAY IMPLEMENTATION & MAINTENANCE**

### **Capital Funding Opportunities**

Since the early 1990s, the number of programs and available dollars for implementing trails and greenways has experienced tremendous growth. During the period from 1973-1991, the states collectively spent just \$40 million on the development of bicycle and pedestrian facilities nationwide. With the passage of ISTEA, the Intermodal Surface Transportation Efficiency Act, and TEA –21, the Transportation Equity Act for the 21<sup>st</sup> Century, this number is now \$600 million, and is still on the rise. When a trail is proposed, one of the chief concerns of local jurisdictions is that a new project will drain local coffers, and put additional strain on budgets that are already stretched thin.

Contrary to popular belief, numerous local, state and federal funding sources are available to acquire, plan, construct and maintain trails and greenways. In addition, rail-trail land acquisition and construction costs, on average are less than one-fifth those of City roads, and less than two percent of highway construction costs. The public health, alternative transportation, and property values benefits associated with greenway development typically outweigh the initial outlay of funding necessary for their construction. Following is a list of the sources that have traditionally been used to fund trail and greenway implementation.

#### **Bicycle Transportation Account (BTA)**

Grant funds for new bike paths, bike lanes, and bike routes, bicycle parking facilities, bike racks on buses, traffic control devices to improve safety, planning, safety, education, and maintenance of bikeways and bicycle parking facilities. Account provides money to local agencies to projects that improve safety and convenience for bicycle commuters. Currently funded at \$7.2 million per year, administered by Caltrans.

#### **Bond Issues**

Though most of the funds from Prop 12, the 2000 Park Bond have been programmed, in March 2002, the voters approved a new \$2.6 billion park bond to improve opportunities for recreation and open space preservation in California. Rail-trails will be eligible under several categories, including Roberti-Z' Berg Harris, and a program to preserve historic transportation structures in California.

#### **Coastal Conservancy**

Funded through Park Bonds and acts of the legislature, the Coastal Conservancy is charged with facilitating and maintaining access to the Coast for all Californians. The Bay Area Conservancy is dedicated to improving access to the San Francisco Bay waterfront, through projects that help to complete, or connect to the 400+ mile San Francisco Bay Trail.

#### **Environmental Enhancement And Mitigation (EEM)**

The EEM program, administered by the Resources Agency, provides \$10 million a year for projects that can enhance or mitigate the impacts of a transportation project. Trails, bike



lanes, and other facilities that may encourage alternative transportation modes to mitigate the air and water quality impacts of another major transportation investment, are eligible.

### **Safe Routes To Schools**

This program, funded at \$20 million a year, and administered by Caltrans, aims to improve school area safety, and encourage children to walk or ride bicycles to get to school. Bike trails, safe crosswalks, speed humps, stop signs and other school area traffic calming or safety improvements are eligible.

### **TDA Article III**

Awarded to local agencies as block grants, Transportation Development Act III funds cover bicycle and pedestrian projects in California. Administered locally, TDA Article III funds are state gas tax monies, and are distributed based on population.

### **TEA-21**

Federal gas tax funding through TEA 21 (Transportation Equity Act for the 21<sup>st</sup> Century) has been the single largest source of funding for trail and greenway projects across the United States. There are several funding sources through TEA-21 for which trails are eligible. Currently TEA-21 contains three major trail-funding programs: the Transportation Enhancements Activities (TEA), Congestion, Mitigation and Air Quality Improvement (CMAQ) and The Recreational Trails Program (RTP). Trails have been the most successful under the TEA program, which currently provides roughly \$60 million a year to California, for projects that create a more balanced transportation system, and provide travelers with more choices and a richer experience.

In the Bay Area, the TEA funds are administered through the Metropolitan Transportation Commission's Transportation for Livable Communities (TLC) program (the grant that funded this concept plan). Typically, \$9 million a year is available for capital construction projects. CMAQ and the Recreational Trails Program provide \$350 million, and \$50 million respectively, on a national level every year through 2003. The Recreational Trails Program is notable because it is available to fund trail maintenance, a top concern of local agencies.

### **Transportation Funds For Clean Air**

TFCA funds are available for transportation projects that improve air quality in California, and bicycle projects are one eligible category. These funds are distributed through the regional level; the Bay Area Air Quality Management District (BAAQMD) administers the \$18 million annually available in the San Francisco Bay Area.

### **Transit Development Fees**

One means to underwrite maintenance of transit systems used in San Francisco are Transit Development Fees, which are levied on real estate development projects downtown, in proportion to the costs of their developments. In downtown San Francisco, where more automobile parking is discouraged, the MUNI bus and railway system is funded in part by local real estate developers; the scope of this program could be expanded to include other areas of the City, and to fund the maintenance of bicycle transportation projects.

## **Bonus Incentives for Development Projects**

Common practice in the entitlement process for real estate development is to give bonus incentives to projects that fulfill some policy goals of the Planning Department. Projects may obtain permission to build higher than normal, for example, if they contribute land or money to neighborhood parks or a bikeway project nearby.

## **Maintenance Funding Opportunities**

An ongoing maintenance and improvement program will ensure that the entire bikeway is kept in optimal condition, and meets or exceeds existing standards. Landscaped areas along the trail will require some periodic maintenance, but good design can keep this to a minimum. Low maintenance and drought resistant trees, shrubs, and ground covers can also minimize upkeep activities. The UC Extension class provided recommendations for plantings that are included in Appendix F.

One specific concern raised by numerous stakeholders was that landscaping in this area would attract homeless encampments. At the Yerba Buena Center Gardens, trained social workers are hired as security guards and are better equipped to work with the homeless and refer them to social service agencies. A similar model might work along the MCB.

Like all transportation improvements, bikeways require funding and staff time for maintenance. Fortunately, several strategies and funding programs are available to reduce the burden to local agencies. Hundreds of trails around the state provide examples of successful management and maintenance strategies. Following is a series of suggestions for innovative ways to fund continued maintenance of the Mission Creek Bikeway.

### **Business Improvement Districts (BID)**

A common strategy to ameliorate conditions in commercial areas, special assessment districts can be created to subsidize landscaping, streetscape improvements, and other amenities for local residents and employees. San Francisco's Union Square presents a successful model of this strategy; revenues from local businesses currently fund a program to keep streets clean and safe. Similarly, a BID would be one way to fund maintenance of the Mission Creek Bikeway and associated landscaping. A BID would require strong support from the area's businesses, which seems to be largely in place along the proposed alignment.

### **California Conservation Corps**

This is not a grant program, but a low-cost source of labor, that can be used to build or maintain trails. The mission of the CCC is to provide meaningful work and educational opportunities to assist young men and women, while protecting and enhancing California's environment, human resources and communities. The program is organized to provide corps members and services depending upon the project requirements. A crew consists of 10-15 well-trained young men and women; a staff supervisor who directs the crew; a vehicle, and basic tools.

### **Recreational Trails Program**

A portion of the federal Transportation Legislation, TEA-21, the Recreational Trails program is notable because it is commonly used for trail maintenance. Administered in California by State Parks, this program provides \$50 million annually for trail projects across the country.

## **Funding Opportunities Unique to the Mission Creek Bikeway**

The City's eastern neighborhoods are undergoing rapid change. These redevelopment efforts present creative opportunities to fund the MCB, including through existing budgets, developer fees, and other private sources. The following is a discussion of these opportunities, for the entire right-of-way and by project segment.

### **General Funding Sources for MCB Project**

#### **SF/PUC Water Department Bond**

A potentially significant source of local funding within the City and County could be the SF PUC/Water Department (Hetch Hetchy Power and Light). There is a major Capital Improvement Project planned to repair and improve the fresh water and waste water treatment systems in San Francisco. Since one of the main sewer collection systems follows the route of the Bikeway (see appendix K), there may be opportunities to include aspects of the MCB Project in the upcoming capital improvement bond. Hetch Hetchy Power & Light have also been identified as a landowner adjacent to the Bikeway at the entrance at Treat and Harrison, and their small building at 15<sup>th</sup> and Harrison has been identified for a potential community resource center. (See discussion under NEMBA on page 61)

#### **San Francisco League of Urban Gardeners (SLUG)**

This non-profit organization, a project of SF DPW, provides landscaping training to men and women from low-income backgrounds, who provide project and maintenance assistance to over 100 gardens citywide. SLUG would be a valuable partner in developing and maintaining landscaping areas along the MCB.

### **Funding Sources By Project Section**

#### **Treat Avenue Street Reconstruction**

The San Francisco Department of Public Works (SF DPW) has an ongoing railroad track removal and street reconstruction program citywide, which already removed the tracks along Harrison St a few years ago. The program also includes Treat Ave. between Harrison and Bryant, but the scheduling of this work was postponed while the MCB planning team finalized their proposal. Joe Ovadia of SF DPW, who coordinates this program said that the northern section of Treat Ave. is currently scheduled for early 2003, and it would be possible to get some of the improvements proposed in the MCB Plan done at this time if the required sidewalk legislation for curb bulb-outs, etc. could be completed by that time. Plans for landscaping the section between 15<sup>th</sup> and 16<sup>th</sup> are too ambitious to be included in their routine sidewalk budgets, and will need to secure additional funding to be implemented.

**Division Street Bikeway**

Three “pocket parks” along Division St, at Bryant, San Bruno and at 9<sup>th</sup> Street are proposed to landscape the Greenway. Local businesses may be willing to contribute time, money, and materials to these pocket parks, which may be more difficult to fund through traditional non-motorized transportation funding. Developer fees collected from surrounding developments could also be levied to support these landscaping improvements (see above).

**Eighth and Townsend Circle**

Bike lanes along Division Street east of the circle are already included in the San Francisco Bicycle Plan. Presumably, the remaining striping will be done using existing City funds with the relatively minor adjustments proposed herein. Most of the other proposed improvements: curb bulb-outs and minimal landscaping, could be absorbed by the private developers who have proposed large projects on the adjacent properties.

For instance, the owner of the Showplace Square properties-- the Bay West Group, currently maintains existing landscaping at the center of the Townsend traffic circle. If funds are obtained to expand the landscaping, including adding public art, they may be willing to assist in the maintenance of these expanded areas. The Bay West Group has also agreed to improve at least a portion of their triangular parcel at the corner of Vermont and Division with landscaping.

**Commons Crossing to Mission Bay**

The preferred alternative from the “upstream” Mission Creek corridor, across the railroad tracks to Mission Bay and the Channel Park, would be a non-motorized bridge, which would be of significant cost, most likely over a million dollars. Projects such as this have been awarded grants under the major trail funding sources mentioned above, such as Transportation Enhancements, Bicycle Transportation Account, and federal/ state appropriations. Funding for Alternative #2 would likely come from similar sources, yet could be at least partially covered by developer’s fees.

## 8. COMMUNITY OUTREACH AND FEEDBACK

### Community Outreach

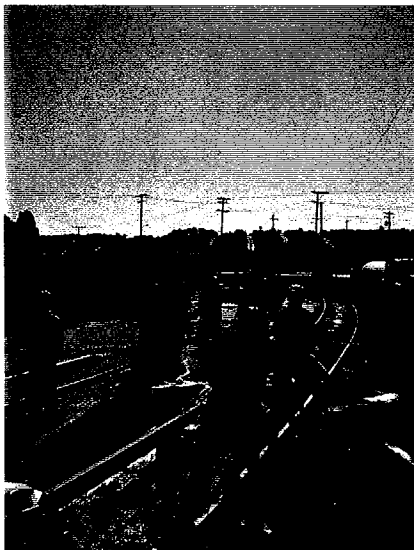
Community outreach for the Mission Creek Bikeway planning process has included:

- three public meetings
- three informational sessions
- several brief presentations at neighborhood meetings
- creation and maintenance of a special web site
- freestanding exhibits in various locations near the project site
- bike tours of the corridor
- committee meetings
- numerous one-on-one meetings with specific, key stakeholders.

Opportunities for feedback, such as surveys and questionnaires, were circulated at each public meeting, at the displays set up at the Design Center, and at the storefront exhibit on Florida St. In addition, there was also substantial feedback gathered through the Mission Creek Bikeway website and solicited through postcard and email announcements.

#### 1. SFBC sponsored a SF Natural History Bicycle Tour on January 27<sup>th</sup>, 2001.

Approximately 50 bicyclists showed up for a tour of Eastern San Francisco's Natural History, which featured a tour of the proposed Mission Creek Bikeway Route, all the way from Pac Bell Park to 16<sup>th</sup> and Harrison. RTC Project Coordinator Josh Hart gave a presentation about the project and the natural history of the Mission Creek, and oral feedback was solicited. Bicyclists witnessed firsthand the need for a bridge over the Caltrain tracks as they trudged through the mud (see photo below).

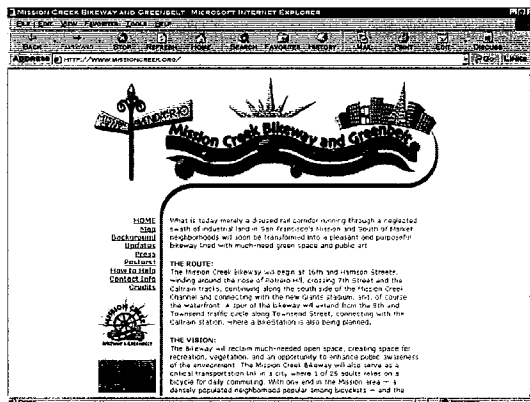


*Bicyclists crossing Caltrain tracks near site of proposed bridge*

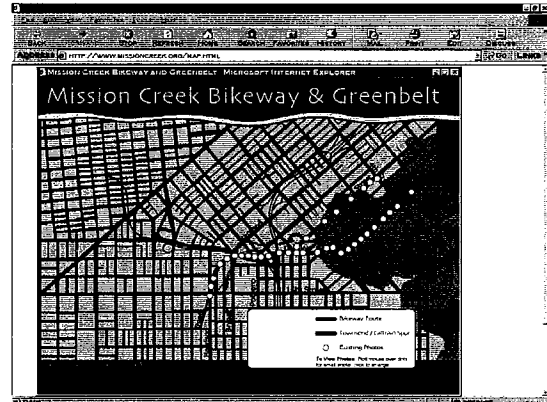


*Cyclists stop to enjoy the circle at 8<sup>th</sup> and Townsend during the Jan. 2001 SFBC Natural History Tour*

## 2. Creation of an official Web Site at <http://www.missioncreek.org>



Mission Creek Home Page



Interactive map at [www.missioncreek.org](http://www.missioncreek.org)

Digipop, a web-consulting firm based in the Mission District, designed and produced the Mission Creek Bikeway web site pro bono. The web site includes a description of the project, photos of the mural at 16<sup>th</sup> and Harrison, updates on the project's progress, tips on how to get involved, feedback opportunities, and press mentions of the project. Arena Reed and Digipop created an interactive bikeway map produced using Flash, showing photos of each section of the corridor. References to the site have been included in mailings advertising the public meetings, and the web site has received thousands of hits since the beginning of 2001. This concept plan will be posted on <http://www.missioncreek.org/> in its entirety.

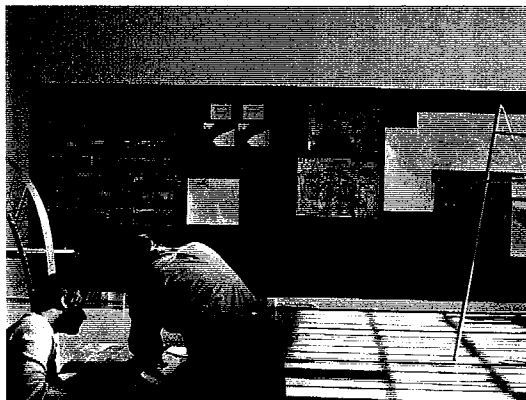
## 3. Two public meetings were held April 23, 2001, at Southern Exposure Gallery

Approximately 600 people were directly invited to attend these morning and evening sessions—200 from our Mission Creek Bikeway database (see Appendix O), including residents, business owners, and property owners along the route as well as 400 Rails-to-Trails Conservancy members living in San Francisco. The meetings were also advertised through the San Francisco Bicycle Coalition's newsletter and member emails, mailed to the SFBC's 3,500 members, through Walk SF's email newsletter, and through the MCB web site, [www.missioncreek.org](http://www.missioncreek.org). An SFBC volunteer hand delivered close to 50 invitations to businesses along the proposed bikeway route about a week prior to the meetings. And the meetings were announced in two popular media outlets: the weekly *Bay Guardian* event listings and a full-length feature article in the monthly *New Mission News*.

The meetings were held at Southern Exposure, a large gallery close to the beginning of the proposed bikeway at 16th and Harrison. A full range of information compiled about the project was displayed. There were five stations set up covering different topics: Transportation, History & Culture, Community Amenities, Engineering/ Planning, and Opportunities and Constraints. Opportunities for public input on each topic included sticky-notes to place on displays, questionnaires asking specific land-use questions (see appendix N) of participants and maps for people to mark up with their ideas.



*Stakeholders gather at Southern Exposure Gallery to listen to a presentation by Kate Bickert of RTC*



*Amanda Eaken of RTC registers a neighbor of the proposed bikeway at the April 2001 Public Meeting*

Approximately 50 people attended the meetings, many of who provided input and ideas for the bikeway. Participants included key property owners along the route (Michael Nicolai of SF Gravel for example), representatives from S.F. Supervisor Chris Daly's office, San Francisco Beautiful, and both the Mission and South of Market Planning Councils. Participants' comments are summarized on page 62.

4. **Storefront exhibit at 405 Florida @ 17<sup>th</sup> (on display for 8 months starting May '01)**  
R&M Development donated space in a new but empty storefront at the corner of Florida and 17<sup>th</sup> Street, 2-3 blocks from the 16<sup>th</sup> & Harrison corner and the portal to the Bikeway. The storefront is narrow and exhibits hanging on the walls could be seen by passersby on the sidewalk. The space was used to meet small groups of stakeholders and share information about the Mission Creek Bikeway project.
5. **NE Mission Business Association (NEMBA) meetings, Apr. 26 & June 28, 2001**  
Two presentations were made to the local business group at the southwest terminus of the proposed bikeway. This group has been familiar with and supportive of the project for many years. From ongoing dialogues with members of this group, loss of on-street parking is a primary concern to them. At their April 26, 2001 meeting they were asked in particular to provide input as to how the section of Treat Ave between Harrison and Bryant should be improved. Landscaping was their primary interest. Concern was also expressed about how bicycles would merge from the side with the intersection at Harrison & 16<sup>th</sup> Street. Seven questionnaires were returned from this group, from business owners and property owners. The second presentation at their monthly meeting in June attempted to solicit input on landscaping for Treat Ave. No clear consensus developed but concern was raised that landscaping could attract homeless people and should be designed so as not to create shelters.

**6. Ballpark Mission Bay Transportation Coordinating Committee meeting, 7/12/2001**

This is a group that meets bi-monthly and includes representatives from each of the transportation related stakeholders in the area, including MUNI, SF DPT, SF DPW, Caltrans, Caltrain, BART, S.F. Giants, Catellus, UCSF, local community groups, etc. The group is already familiar with the MCB Project, and the Madrina Group solicited their input on the most recent plans for the 8<sup>th</sup> & Townsend Circle and the Caltrain crossing from 7<sup>th</sup> St to Mission Bay. The Townsend Circle is still intended to have signals installed once the developments at Mission Bay generate sufficient traffic in 5 years or so. However, the group seemed to think that 5 years was too far off to deal with at this time.

Regarding the current scheme for the “Commons Crossing” the Wilbur Smith traffic engineer (hired by Catellus) confirmed that there was not room enough even for bike lanes in this crucial portal to Mission Bay, due to the configuration of the overhead freeway columns. The Caltrain representative said that discussions were still alive regarding the undergrounding of the railroad tracks for the Caltrain Downtown extension, which could solve the problems created by the restriction of adding more at-grade crossings of the tracks.

Subsequently it was determined that if the Caltrain Downtown Extension project ever happens, it would only go underground around 5<sup>th</sup> St., and would likely not alleviate the problem currently faced by the Mission Creek Bikeway (and current bicycle routes) connecting to Mission Bay from the west. Comments were solicited regarding a pedestrian/bicycle bridge and this proposal received favorable feedback. Many people commented that such a bridge would likely be expensive, however.

**7. Mission Bay Community Advisory Committee meeting, July 12, 2001**

This is a community group supported by the SF Redevelopment Agency that meets regularly to provide input to Catellus and UCSF regarding the overall development of Mission Bay. They have been intimately involved in the design of the new park and bikeway around the harbor/channel where Mission Creek reaches the SF Bay. The Madrina Group has been involved with the MBCAC for years and they are familiar with and supportive of the “up-stream” segment of the Mission Creek Bikeway (from 7<sup>th</sup> St. to 16<sup>th</sup> and Harrison). At the July 12 meeting we updated them on our planning study progress, notified them of the semi-permanent exhibit at 405 Florida Street and solicited their suggestions regarding improvements to the Caltrain crossing. They expressed frustration with the traffic engineering to date, especially with the lack of bicycle lanes in or out of Mission Bay at the “Commons Crossing.” We discussed the likelihood of raising money for a bicycle/pedestrian bridge over 7<sup>th</sup> Street and the Caltrain tracks and agreed that both our groups should begin raising the idea with other relevant agencies.

**8. SPCA Animal Wingding, September 9, 2001**

A tabletop exhibit was presented at the annual SPCA street fair held along Treat Ave. and Alabama St. Few of the people interested were local stakeholders yet feedback was overwhelmingly supportive. The most frequent feedback involved the danger of riding a



bike in San Francisco at all, anywhere. Few people were familiar enough with the immediate area to respond to our questionnaire.

**9. Design Center Informational Meetings, September 20-26, and October 4<sup>th</sup>, 2001**

The SF Design Center is a collection of buildings leased primarily to professionals in the interior design and related trades, located on Division Street at the 8<sup>th</sup> & Townsend Circle. A triangular portion of land in front of the Design Center (which was once railroad right-of-way and is owned by the Bay West Group) offers an ideal space in which to incorporate green space and/or art installations. An exhibit was set up in the Design Center's Pazzo Café and tenants and other neighborhood businesses were invited to attend one of two informational sessions at the end of the day. Attendance by the tenants was poor but the conveniently located and accessible exhibit was helpful in getting individual stakeholders to meet with the planning team (see discussions below), with a full display of information at hand. The exhibit remained posted for a few additional weeks in order to solicit greater input from local residents and employees.

**10. Dolby Laboratories Meeting, February 20, 2002**

Dolby Labs is located directly along the proposed Mission Creek Bikeway route. About 12 Dolby employees attended an hour-long presentation made at Dolby Headquarters. There was unanimous support from the group for the Mission Creek Bikeway project. Henk Van Bijleveld, Dolby Facilities Director, offered to write an official letter of support for the project from Dolby, and the other attendees offered to write personal, individual letters of support. Van Bijleveld also offered Dolby's assistance in maintaining the path once built, pointing to Dolby's current \$700/month commitment in maintaining landscape in the area. It is anticipated that Dolby could be a leader in local, corporate support of a Mission Creek Bikeway.

The group emphasized the importance of linking the Bikeway to transit stations, particularly the Caltrain station at 4<sup>th</sup> & King Streets. Because Dolby operates out of two buildings on Division Street, their employees generate much foot traffic in the area, and they believe a pathway will be a great safety benefit. The Dolby employees expressed concern or interest in a number of specific bicycle safety issues, including: developing creative solutions to dealing with the busy intersections at Division & Potrero and at Division & Bryant Streets, providing adequate lighting on the pathway, and ways to deal with trucks' sometimes limited visibility. The group expressed that while parking loss should be considered, it was acceptable to replace parking spaces with the bike path, as they expected bicycling would greatly increase in the area if the pathway were developed, thus reducing demand for parking in the area generally.

**11. Public Meeting held May 8, 2002 at 321 Potrero St.**

Approximately 40 people attended this public meeting intended to update interested parties in the progress of the Mission Creek Bikeway planning process and to solicit input before the plans were submitted. The meeting was held at a large gallery/studio space at 321 Potrero Street, close to the site of the proposed Bikeway. (The space was also useful for holding other, smaller meetings with key stakeholders such as local landowners, etc.)

Postcard invitations were mailed to approximately 300 people, including key stakeholders and individuals who had attended previous meetings or expressed interest in the project via the website, etc. The public meeting was also announced on the Mission Creek Bikeway website and to the SF Bicycle Coalition's 3,500 members via an electronic newsletter. Participants in the public meeting included area neighbors, representatives of tenants along the Bikeway site (including AC&C and Dolby Labs), and city representatives.

A colorful exhibit was set up in the two-story gallery space showing the progress of the Mission Creek Bikeway project to date, including historical maps and photos and a range of initial design concepts, including many creative ideas for the Treat Avenue section submitted by planting design students at UC Berkeley Extension (see appendix G and the discussion on page 45). Attendees were encouraged to share their suggestions on sticky-notes placed on the design concepts posted on the walls. Judy West of Madrina Group and Josh Hart of Rails-to-Trails Conservancy made a brief presentation about the evolution of the project and the next steps. A great deal of informal discussion took place between meeting attendees during the two-hour open house-style meeting, most of whom stayed at the event for well over an hour.

Attendees expressed support and enthusiasm for the project, emphasizing the anticipated effects of increasing the area's livability and the importance of art in the area. Bike safety was a top concern as well, with much interest in improving the visibility of bicyclists, particularly at intersections. Support was expressed for colored pavement on the trail to emphasize bicyclists' presence, as well as bike-only phases at busy intersections.

- 12. NEMBA meeting May 30, 2002 with SF PUC Planning Bureau Manager, Michael Carlin.** The SF PUC (Water Dept, Hetch Hetchy, etc) is preparing a 4 billion dollar capital improvement program aimed at upgrades to the regional fresh water and local waste water systems over the next decade. Mr. Carlin came to speak to NEMBA members about the bond measure expected to be on the November 2002 ballot and the scope of capital improvements to be funded. The PUC had just changed their approach, by separating the waste water component of their program, from upgrades to the fresh water systems, in response to community feedback requesting more modern approaches to waste water management, especially in regards to separation of the street run-off from the sewers. The PUC will spend the next year with community stakeholders preparing a more comprehensive program with alternatives to traditional big sewer plants.

The issue is important to NEMBA because this organization represents businesses along the lower reaches of the main sewer collectors for the eastern part of the City. The Mission Creek Bikeway runs over the top of these huge sewer mains, which understandably follow the course of the natural drainage and river. Mr. Carlin was enthusiastic about the suggestion that landscaping and streetscape improvements for the MC Bikeway could possibly tie into possible efforts to separate street run-off from sewer flow. The industrial areas at the bottom of the drainage basin would be ideal locations for pilot projects, which could expand "upstream" later.

- 13. Showplace Square/Potrero Hill, Community Planning Meetings spring 2002.** A series of meetings have been held in each of the eastern neighborhoods (See Exhibit 5 for locations), sponsored by the SF City Planning Dept., in which rezoning options for these industrial areas is under discussion. The MCB is located primarily in the Showplace Square area, where it has received widespread support by the major property owners along the route, and by the larger community who are looking for more open space opportunities. The overwhelming consensus in these meetings has been to support a change in zoning to encourage housing, which is consistent with the amenities provided by the Mission Creek Bikeway.
- 14. Mission Bay Bicycle Coordinating Committee June 6, 2002** at DPT with Catellus, SF Redevelopment Agency, Jack Fleck & Pete Tannen (DPT), Corrine Woods (MC Harbor Assoc.), SFBC, Madrina and Rails to Trails. Outstanding bicycle issues in the Mission Bay Redevelopment Area were reviewed by the major stakeholders. These included bike access across the Caltrain tracks at the Commons and 16<sup>th</sup> St. crossings, the surface of the bike path along the new MC Park, bike access across the 3<sup>rd</sup> St bridge and bike lanes along the waterfront. It was determined that there was enough room to stripe a bike lane on the EB roadbed from 7<sup>th</sup> St to the Commons Circle (no bike lanes over the tracks themselves, however). DPT, RTC, and SFBC objected to the decomposed granite surface planned through Mission Creek Park. Redevelopment promised to explore alternative hard surfaces for this path that are recommended. DPT agreed to confirm there was enough space to provide a “refuge” in the median, for EB bicyclists turning left onto Berry. Bike lanes over the 16<sup>th</sup> St crossing will remain problematic due to freeway column space constraints, which leave the Commons Crossing all the more vital for access in and out of Mission Bay. Accommodations for a non-motorized bridge over the tracks was beyond the scope of this meeting.

## Community Feedback

A survey (see appendix N) distributed at the first two community meetings asked participants to prioritize six potential uses of the space along the Mission Creek transportation corridor. Averaging the scores of each of the six uses presented, there was widespread consensus on the following ranking:

1. Off-street bikeway and pedestrian path
2. Green Space
3. MUNI Line
4. Public Art
5. Parking Lots
6. On-street Parking

Participants were also asked for input on specific sections of the bikeway and overall comments and suggestions. Comments generally fell into the following categories:

1. **Safety:** emphasize safety for cyclists and pedestrians with a separated path to encourage new or inexperienced cyclists; intersections need special attention; consider raised crosswalks/specially colored crossings
2. **Continuity:** while most participants indicated their preference for a separated, continuous path, some advocated using and expanding existing bike facilities and locating the path in less auto-intensive areas wherever possible rather than having to acquire property or build a new, dedicated path.
3. **Connectivity:** with existing/future bike lanes, destinations, and transit hubs, e.g., Caltrain station at 4<sup>th</sup> and King; connect with a southbound bike route; connect UCSF facilities at Harrison and 14<sup>th</sup> with the new facilities under construction at Mission Bay
4. **Decrease driving:** the bikeway should be designed and promoted to encourage commuting downtown (including South of Market) by bike or foot (including in-line skates)
5. **Landscape and art:** look for opportunities for small parks and picnic areas; use benches, vegetation, bollards, or other small-scale markers continuously along path—as both practical and decorative elements to enhance the safety and visual continuity of the route; use low-intensity lighting, especially in industrial areas, to highlight the route.
6. **Maintenance:** the bikeway represents an ideal opportunity to make the areas along the route cleaner and safer; funding and implementing long-term maintenance is critical.

## Feedback from Key Stakeholders

In addition to the public meetings, Judy West and project partners met with many of the key business and property owners and governmental decision makers along the route to discuss issues and concerns and garner their support for the project.

*The following stakeholders are actual owners/tenants of the railroad land sold in 1991/1992:*

**Allan and Marian Byer, of Byer Properties,** are by far the largest property owner of the railroad lands. They operate a clothing manufacturing business in several buildings along Division and lease other properties in the area as well. The railroad land they purchased 10 years ago has been used entirely for parking and truck loading. The Madrina Group had been trying to make contact with Byer Properties intermittently for many years with no avail, regarding the concept of a bikeway and greenbelt along the rail corridor that they purchased. In late 2000 Madrina was informed of a permit approved by City Planning for a warehouse building on the one parcel of railroad land owned by the Byers where a building could be constructed (since it was not under the Central Freeway) at the corner of Treat and Bryant. The Madrina Group filed an appeal of the permit to the SF Board of Appeals in 2001, which finally resulted in an audience with Alex Byer. At that meeting, Judy West and Mr. Byer discussed alternatives to the subject building proposal, which included a land trade with the City for a MUNI building across the street. Mr. Byer said they would be open to proposals from the City but they did not think it was likely that the City could respond in a time frame

that would meet their requirements to expand their operations. Conversations with MUNI were not forthcoming of a land trade proposal.

The Board of Appeals upheld the site permit in 2001 and in 2002 the Madrina Group again tried to have the design of the loading docks modified during the building permit review process to no avail. As of June 2002 the building is currently under construction, occupying space that would have provided landscaping and a strong visual perspective of the curved river. But Treat Ave. is relatively slow moving and with additional traffic calming, the street can be used as a Bike Boulevard. But the relationship between the MCB project and Byer Properties has been strained in the process. Further communication with the Byers should come from the City and Caltrans.

**Alex Szabo**, former manager of **Gold's Gym**, leases much of the Byer's railroad land for parking. Gold's Gym also shares a large Caltrans lease with the Jewelry Center for parking, between Alameda & Division, Potrero & San Bruno. Conversations with Mr. Szabo revealed that their primary concern was maintaining car parking for clients. Yet he added that many more of their clients would ride a bike to the site if secure bike parking were available. Visitors to the area are reluctant to park their bikes due to theft of bike parts, primarily by homeless. Because the Mission Creek Bikeway would require land that is currently utilized for Gold's Gym client parking, we discussed the possibility of a land trade where the Byer's RR land would be exchanged for the section of San Bruno Ave. between Division and Alameda, which he thought was acceptable, as long as the number of spaces is maintained.

**Bill Poland and the Bay West Group** own the SF Design Center and many other buildings in the area. He expressed enthusiastic support for the bikeway concept and has plans to develop housing on some of their properties, which he feels would benefit from the landscaping and street level improvements. Mr. Poland has a landscape architect (Smith and Smith) working on generalized plans for their properties.

**Barry Campbell** is the Operations Manager at the **SF Design Center**, located at the 8<sup>th</sup> & Townsend Circle. Mr. Campbell was kind enough to allow us to place an exhibit in the main lobby of their building at the corner of Division & Kansas, where we have had informal informational sessions and meetings with specific stakeholders. He maintains that their tenants depend on him to look out for their interests on issues such as the bikeway planning. He sees the area as primarily pedestrian, with automobiles passing through creating problems for the local businesses. He commented that the 8<sup>th</sup> & Townsend Circle needs better signage and earlier warnings for drivers not accustomed to traffic circles. His employer, the Bay West Group, maintains the landscaping (pays for water, etc) in the center of the circle and places a high priority on visual improvements to the area. Currently the triangle of land in front of the Design Center (which was originally railroad corridor) is used for parking and storage containers. Any plan to landscape this triangle and incorporate it into the bikeway is dependent on the Design Center's need for a new site to accommodate these containers. Mr. Campbell would support a coordinated effort by the primary stakeholders in the area to create a plan whereby everyone's needs were addressed.

**William Smith** of **Smith and Smith Landscape Architects** has been retained by Bill Poland and the Bay West Group (Showplace Design Center). He was inspired by the MCB proposal and encouraged the MCB design team to move ahead step by step, with small pockets of landscaping, which he assured us would eventually string together like a jeweled necklace.

**Steven Kuklin** of **AF Evans Development**, who own one of the key properties on the corridor, including the sewer easement (on which it is forbidden to build any permanent structures) which links Division Street to 7<sup>th</sup> Street and the portal to Mission Bay. They propose to build a housing project at 601 King St., which is scheduled for a public hearing with the SF Planning Commission June 20, 2002. They have incorporated the Mission Creek Bikeway into their open space design (see Exhibit 17 on page 33), providing an important linkage of the Bikeway to Mission Bay. Preliminary discussions with Mr. Kuklin regarding a pedestrian/bicycle bridge over 7<sup>th</sup> Street and the Caltrain tracks, indicated that he thought it would enhance their property and could be located along the north side of Berry, adjacent to his building.

**SPCA** held their annual street fair along Treat Ave. on Sept 9, 2001, and a small exhibit was presented. Prior to the beginning of the Mission Creek TLC planning process, the Madrina Group helped facilitate a "land trade" between the SPCA the City of SF in which 15 feet of the railroad corridor was added to the public right-of-way to be used for the Bikeway. At the time the improvements were made to reconfigure the property lines and pave the street, a parking lot and sidewalks, the SPCA was not willing to provide landscaping on their property as they thought it would attract homelessness until the area was improved. The SPCA runs an ongoing dog-walking program and is increasingly supportive of landscaping plans for the area.

**Michael Nicolai** of **SF Gravel & Nicolai Supply** owns a key parcel adjacent to the corridor, which also includes part of the sewer easement owned by AF Evans. Mr. Nicolai came to our first meeting in April and was favorably impressed. He operates a gravel supply company, which is becoming outdated relative to the high-end office and residential complexes going up in the neighborhood. We have spoken about trading some of his land along the sewer easement (to create a real public right-of-way) in exchange for narrowing the public street along one of his frontages. He expressed openness to these ideas.

## **Other Primary Stakeholders**

**Chris Daly** is Supervisor for District 6, which includes the vast majority of the Mission Creek Bikeway project area. Representatives of the MCB planning effort (Leah Shahum, SFBC; Kate Bickert, Rails-to-Trails; Judy West, Madrina Group) met with Supervisor Daly on May 22, 2001. Supervisor Daly expressed his support for the project and authored the resolution to support planning and creation of the MCB, which passed in May 2001 (See Appendix C). Supervisor Daly's legislative aide, Bill Barnes, also attended the MCB open house in April.

The **San Francisco Planning and Urban Research Association (SPUR)** is San Francisco's preeminent public policy think tank, promoting progressive land use planning. The Mission

Creek Planning Team met with SPUR several times over the past year, including a meeting with staff and board members on July 11, 2001 and May 2002 to discuss SPUR's involvement in the Mission Creek Bikeway planning project. SPUR offered to bring additional resources to the project in terms of contacts, expertise in working on complex city development projects, and helping to build support within the local business community. Jim Chappell said he believed that the SF Transportation Authority was the City entity most able to move the project forward.

**Jose Luis Moscovich**, Executive Director of the **SF County Transportation Authority**, oversees most of the transportation funding in San Francisco. Project partners met with Mr. Moscovich on January 30, 2002, along with **Joe Speaks**, Special Assistant to the **MUNI** General Manager, to discuss the MCB project. Both expressed support for the project. Mr. Moscovich discussed the probable inclusion of the MCB project in San Francisco's upcoming 20-year transportation plan update. He also offered advice on dealing with multiple city agencies on a broad project of this type. He shared key information regarding Caltrain passing through the Mission Bay area and its effects on the Bikeway. The discussion with Mr. Speaks focused on the possibilities of utilizing MUNI property along the MCB corridor to help facilitate the project's progress.

**Jose Farran** is a transportation consultant for **Wilbur Smith**, which is working for Catellus to develop the Mission Bay area. Discussion focused on bicycle connections to the planned Mission Bay area, including 7<sup>th</sup> Street and 16<sup>th</sup> Street. Also covered was a discussion of bikeways within Mission Bay, including the Commons, which crosses the tracks closest to the MCB route. Discussions will continue outside of the Mission Creek Bikeway planning process on these issues.

Mr. Farran shared useful details regarding the future grade separated crossing of 7<sup>th</sup> Street and the railroad tracks. It was concluded that the eastern end of the channel is open space, and apparently no permanent structures would be erected on this site that would prohibit a future bike/ pedestrian bridge from 7th and Berry directly to the Channel pathway although space is always tight. Further engineering analysis needs to be completed, but as far as we know, nothing in the Mission Bay plans should prohibit such a structure. Mr. Farran also suggested that the pedestrian at-grade crossing of the tracks could be slightly expanded to accommodate bicycles as well. A previous study of a grade-separated structure for cars to replace the Commons at-grade crossing was conducted some years ago and may be helpful in determining the feasibility of a new bike/ pedestrian bridge there.

**Peter Straus** is Manager of Service Planning for **SF MUNI** that owns key properties adjacent to the corridor. MUNI was contacted when the idea arose of trading some of the Byer property for the MUNI building located at Division/Alameda and Bryant. A presentation was made to the Municipal Transportation Agency in February 2001 at which time the MUNI Board directed Mr. Straus to work with the Madrina Group and consider a light rail extension along the Mission Creek corridor. In conversations over the following months, Mr. Straus relayed that while MUNI would consider selling property, they generally prefer to sell more valuable parcels that could be used for things like housing development. In order for them to look favorably at trading the subject site for portions of a rail corridor,

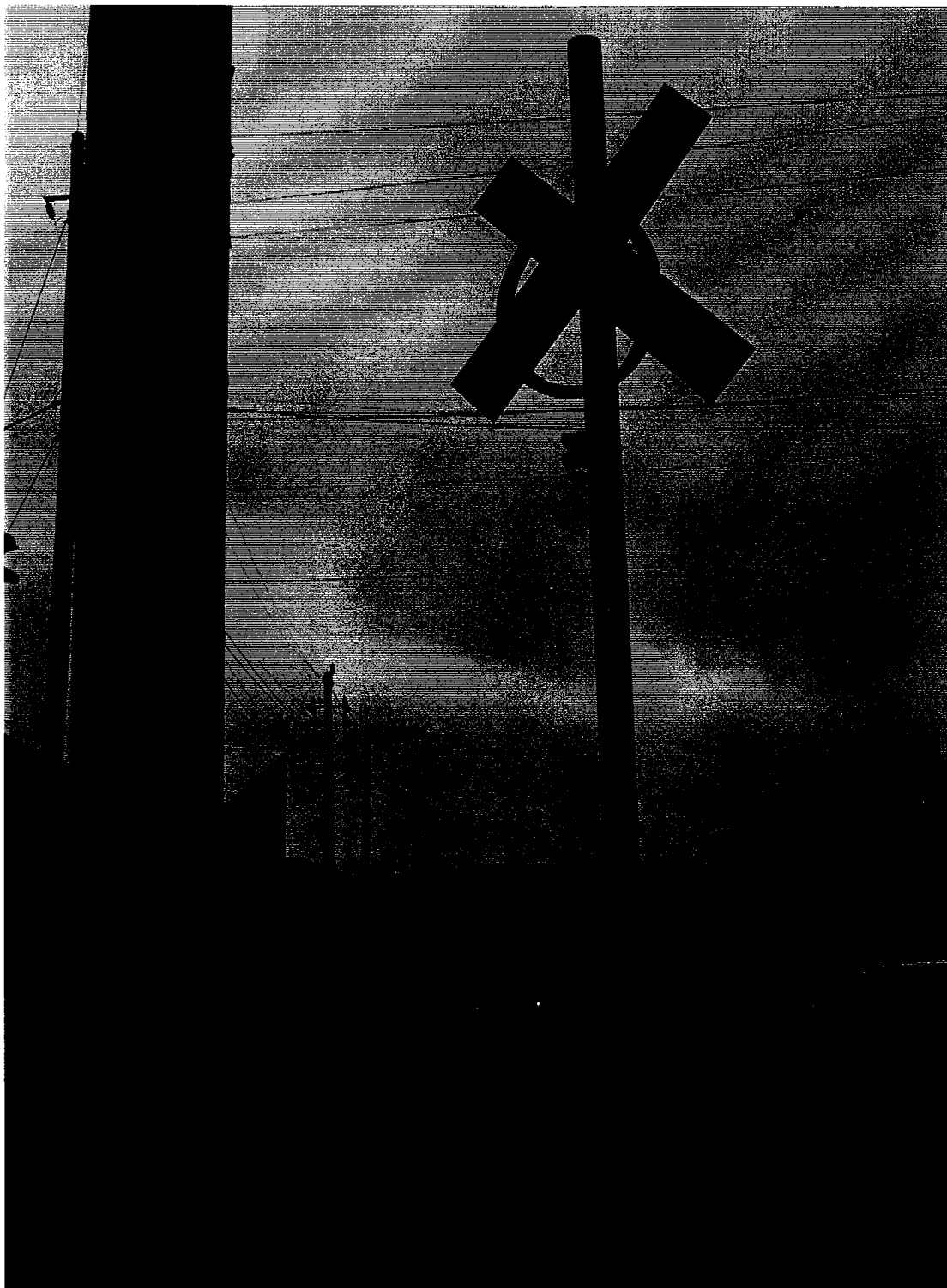
they would need to view the rail corridor for their own use, otherwise funds would need to come from outside sources to purchase the property outright. Because MUNI has determined that 16<sup>th</sup> Street is the preferable alignment, it is unlikely that MUNI will play a lead role in land acquisitions. In order for further consideration of a possible land trade/ sale, direction must come from the Board of Supervisors.

**Quinn Printing** owns a building adjacent to the corridor at the corner of 16<sup>th</sup>, Harrison & Treat. In 1999 the company authorized the installation of a permanent, tile mosaic mural depicting Mission Creek on the side of their building. This site is prominent as it is part of the western entrance to the Bikeway from Harrison St. In recent conversations they have expressed interest in more decorative artwork along their diagonal wall and fence that follows the corridor.

**Tim Hill** is the architect for 675 Townsend St. project, being proposed just east of the 8<sup>th</sup> and Townsend Circle by **De Anza Development**. Discussion centered around the width of sidewalks in the area and a planned truck loading dock at King and Division Streets, which could conflict with the Bikeway through the area. There may be an opportunity to move the loading entrance slightly east and/or to "bulb out" the bikeway so that a line of bollards would separate the bike/ pedestrian and loading uses, and trucks would access the loading dock from 7th and King. Unfortunately, the development is far enough along that a wholesale relocation of the loading dock is impossible at this point, but there may be ways to make it work with slight modifications. Hill was personally receptive of the planning effort and will continue to stay informed and involved. We hope the Class I bikeway in front of their property can be incorporated into their normal sidewalk work.







*Hints of transportation modes along Mission Creek, both past and future: a remnant of the railroad with a hanging bicycle tire at Division and De Haro*

## GLOSSARY OF TERMS

<b>AC&amp;C</b>	Animal Care and Control, located at 15 <sup>th</sup> and Treat
<b>ADA</b>	Americans with Disabilities Act
<b>APN</b>	Assessor's Parcel Number
<b>Arterial</b>	A major motor vehicle through route
<b>BAAQMD</b>	Bay Area Air Quality Management District
<b>BART</b>	Bay Area Rapid Transit – San Francisco Bay Area Transit service
<b>BID</b>	Business Improvement District; collects fees from local businesses for street enhancements, improvements, and maintenance
<b>Bike route</b>	A street or pathway designated by a city or county for use by bicycles.
<b>Bikestation</b>	A valet parking facility for bicycles, often located at transit terminals, often provides other services such as bike rental, repair, information, and refreshments
<b>Bikeway</b>	A bike path, lane, or route designed for use by bicycles
<b>Bollard</b>	A barrier post, usually 30 to 42 inches in height, used to inhibit vehicular traffic
<b>Bollard (automatically retractable)</b>	An electronic bollard that recedes into the ground, either on a fixed schedule or by remote control, frequently used in European central cities
<b>Bulb-out</b>	Another term for curb extension; a section of sidewalk at an intersection or mid block crossing that reduces crossing width for pedestrians and can help slow traffic
<b>CAD</b>	Computer aided design
<b>Caltrain</b>	Commuter rail between Gilroy and San Francisco along the Peninsula
<b>Caltrans</b>	California Department of Transportation
<b>Catellus</b>	Private corporation responsible for redevelopment of Mission Bay
<b>CCC</b>	California Conservation Corps
<b>CEQA</b>	California Environmental Quality Act

<b>Class I</b>	Exclusive non motorized pathway, usually used by both bicyclists and pedestrians
<b>Class II</b>	On street bike lanes
<b>Class III</b>	Bike route, usually slow speed neighborhood street, no specific design features
<b>CMAQ</b>	Congestion Mitigation Air Quality (federal grant program)
<b>Curb cut</b>	A ramp to allow wheeled vehicles access between street and sidewalk
<b>Designated (signal) phase</b>	A signal phase with no conflicting traffic, i.e. no right or left turns across a given path
<b>DPT</b>	San Francisco Department of Parking and Traffic
<b>DPW</b>	San Francisco Department of Public Works
<b>EB</b>	Eastbound
<b>EIR</b>	Environmental Impact Report
<b>F Line</b>	Historic MUNI streetcar line, runs from the Castro District to Fisherman's Wharf
<b>Greenbelt</b>	Protected natural or restored lands that provide a continuous corridor through or around urbanized areas
<b>Greenway</b>	A linear open space established along a corridor, such as a river, railroad, ridgeline, or other route for conservation, recreation, and transportation
<b>HHP&amp;L</b>	Hetch Hetchy Power and Light, part of SF Public Utilities Commission
<b>ISTEA</b>	Intermodal Surface Transportation Efficiency Act, federal transportation bill authorized in 1991, predecessor to TEA21
<b>LOS</b>	Level of Service; a measurement of the delay to motor vehicles at a given intersection; does not consider safety or convenience for bicyclists, pedestrians or transit riders; measured on scale from A to F
<b>MBCAC</b>	Mission Bay Citizen's Advisory Committee
<b>MCB</b>	Mission Creek Bikeway

<b>MTC</b>	Metropolitan Transportation Commission, responsible for transportation planning and distribution of federal transportation funds to the nine county San Francisco Bay Area
<b>MUNI</b>	San Francisco Municipal Railway (includes bus system as well).
<b>NEMBA</b>	Northeast Mission Business Association
<b>Ohlone</b>	The Native Americans who inhabited the San Francisco Bay Area before European Colonization; also referred to as Costanoan
<b>Pedestrian style (left turn)</b>	A bicycle maneuver intended to avoid merging left for a turn, esp. in heavy traffic; involves riding across an intersection, waiting at the crosswalk, and crossing with pedestrians, on or off one's bicycle
<b>Pocket (left or right turn)</b>	A short lane intended to separate vehicles making turns from those proceeding straight through an intersection
<b>Pocket parks</b>	A small park, often implemented on corners or other under utilized areas
<b>PUC</b>	Public Utilities Commission, responsible for approval of at-grade crossings of railroads among other things
<b>RTC</b>	Rails-to-Trails Conservancy, a national organization based in DC with over 100,000 members with an office in San Francisco; see <a href="http://www.railtrails.org">http://www.railtrails.org</a>
<b>RTP</b>	Recreational Trails Program, a subset of TEA-21
<b>SFBAC</b>	San Francisco Bicycle Advisory Committee
<b>SFBC</b>	San Francisco Bicycle Coalition, with over 3,400 members, works to promote better bicycle facilities in San Francisco and greater numbers of people riding
<b>SLUG</b>	San Francisco League of Urban Gardeners
<b>SOEX</b>	Southern Exposure Gallery at Project Artaud in the Northeast Mission
<b>SOMA</b>	South of Market Area of San Francisco
<b>SP</b>	Southern Pacific Railroad Company, merged with Union Pacific in 1996
<b>SPCA</b>	Society for the Prevention of Cruelty to Animals, located at Alabama and 16 <sup>th</sup> St.
<b>SPUR</b>	San Francisco Planning and Urban Research Association
<b>TDA article 3</b>	Transportation Development Act funds intended for bicycle/ pedestrian projects, originates from state gas taxes and distributed based on population
<b>TEA-21</b>	The Transportation Equity Act for the 21 <sup>st</sup> Century

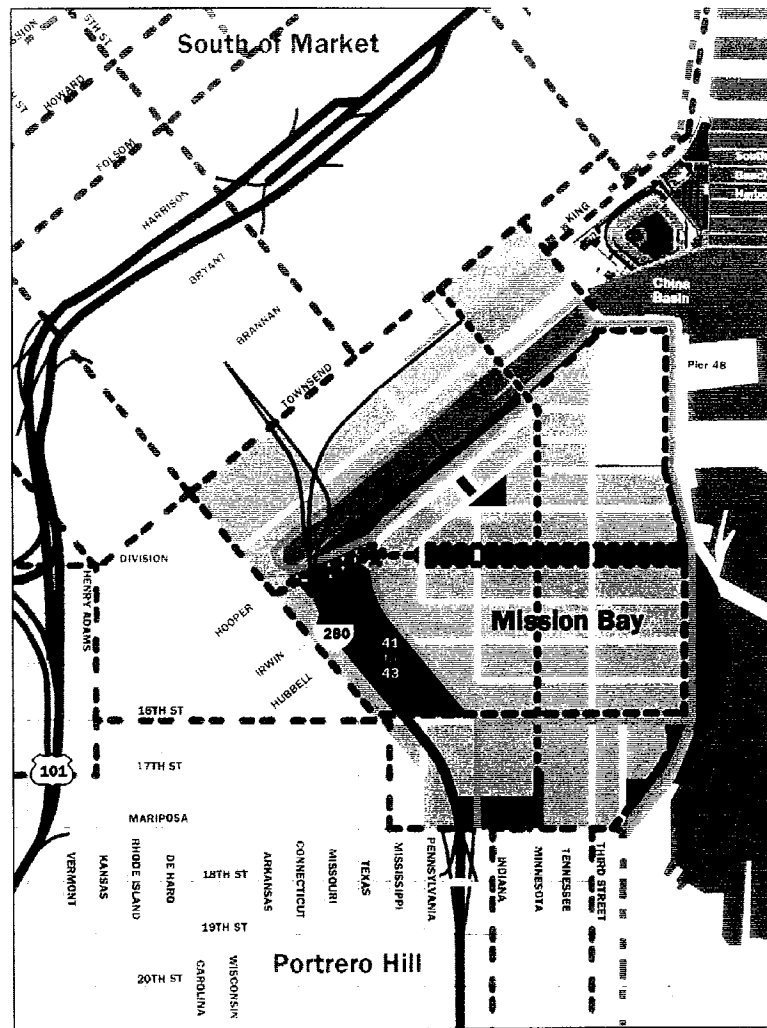
<b>TEA</b>	Transportation Enhancement Activities, a funding program within TEA-21; see <a href="http://www.enhancements.org/">http://www.enhancements.org/</a>
<b>TLC</b>	Transportation for Livable Communities; a planning and capital program administered by the MTC using TEA funds to enhance the transit/ bike/ ped experience
<b>Traffic calming</b>	Techniques used to slow motor vehicle traffic, can include bulb-outs, chicanes, speed bumps, street parties, banners, statues, or other strategies to capture a driver's interest
<b>UCSF</b>	University of California San Francisco; the medical arm of the UC system; new campus is being developed at Mission Bay
<b>Vacation (street)</b>	The abandonment of a public thoroughfare for sale, trade, or development; must be approved by Board of Supervisors
<b>WB</b>	Westbound
<b>Zebra style (crosswalk)</b>	A crosswalk striping design, also called "ladder style" with parallel stripes, considered the most visible marking to drivers



# APPENDICES

- Appendix A:** Mission Bay Bike/ Ped Network
- Appendix B:** SF Bike Route Map
- Appendix C:** San Francisco Board of Supervisors Resolution
- Appendix D:** Potrero Pedestrian Island Design
- Appendix E:** Initial Design Concept
- Appendix F:** Landscape Species Suggestions
- Appendix G:** Planting Design Class Projects
- Appendix H:** Mission Creek Park Plan
- Appendix I:** 675 Townsend Ground Floor Plan
- Appendix J:** Mission Bay Commons Crossing Plan
- Appendix K:** Sewer System Map
- Appendix L:** MCB Walking Tour Guide
- Appendix M:** Community Meeting Flyer
- Appendix N:** Community Survey

# Appendix A: Mission Bay Bike/ Ped Network



**Bicycle & Pedestrian Routes**

## Mission Bay Project Bikeways

- Class I
- Class II
- Class III
- Existing City-Wide Bicycle Routes
- Mission Bay Project Pedestrian Access and Jogging Trails
- Existing City-Wide Pedestrian Network: Bay Trail



## Appendix B: SF Bike Route Map

### San Francisco Bike Map & Walking Guide

#### How to use this San Francisco Bike Map & Walking Guide

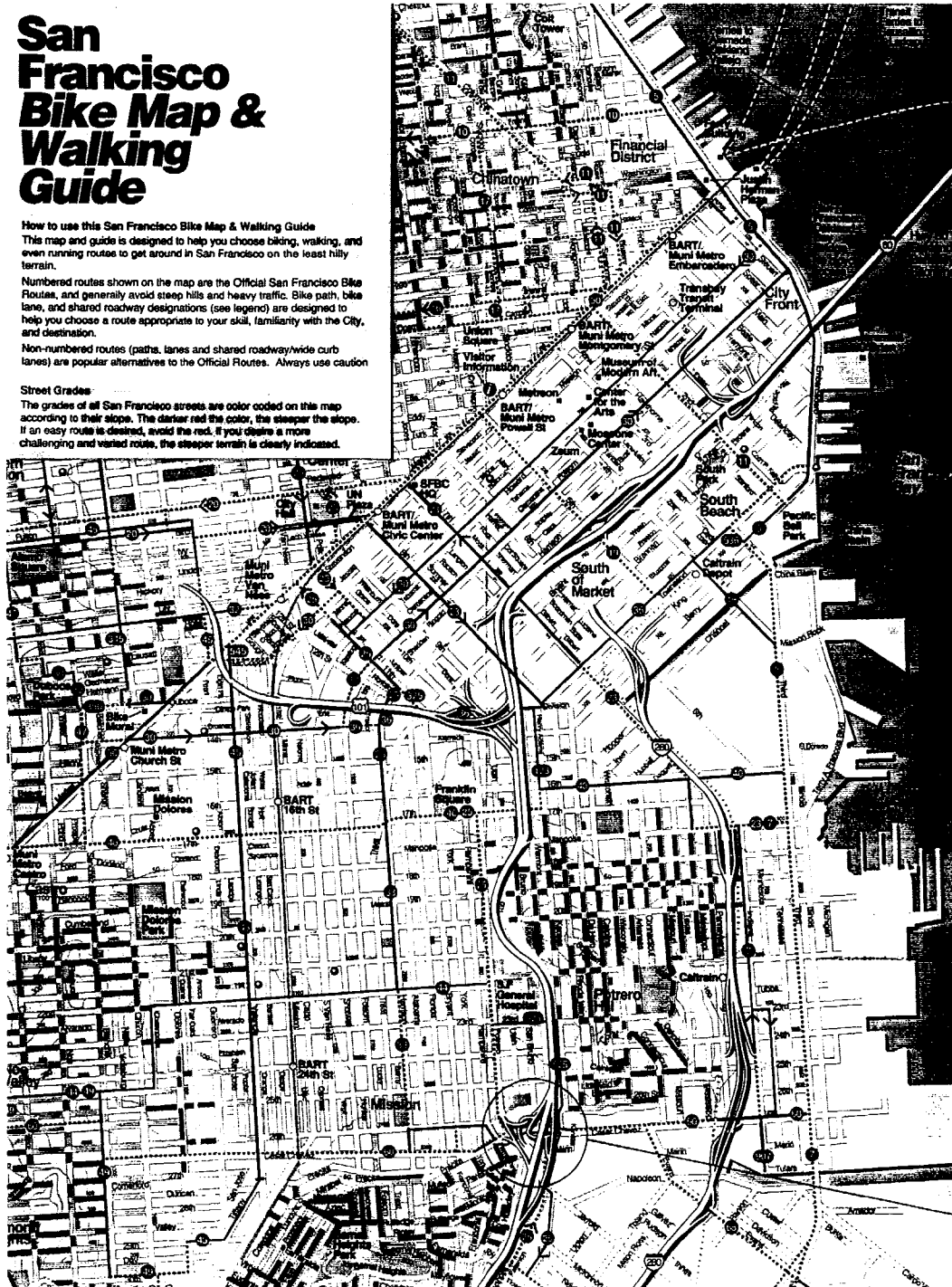
This map and guide is designed to help you choose biking, walking, and even running routes to get around in San Francisco on the least hilly terrain.

Numbered routes shown on the map are the Official San Francisco Bike Routes, and generally avoid steep hills and heavy traffic. Bike path, bike lane, and shared roadway designations (see legend) are designed to help you choose a route appropriate to your skill, familiarity with the City, and destination.

Non-numbered routes (paths, lanes and shared roadway/wide curb lanes) are popular alternatives to the Official Routes. Always use caution.

#### Street Grades:

The grades of all San Francisco streets are color coded on this map according to their slope. The darker red the color, the steeper the slope. If an easy route is desired, avoid the red. If you desire a more challenging and varied route, the steeper terrain is clearly indicated.



# APPENDIX C (Page 1 of 3): SF Board of Supervisors Resolution



## City and County of San Francisco Master Report

City Hall  
1 Dr. Carlton B. Goodlett Place  
San Francisco, CA 94102-4689

File Number: 011024		File Type: Resolution	Status: Passed		
Enacted: 474-01		Effective:			
Version: 1		Reference:	In Control: Mayor		
File Name: Mission Creek Bikeway Project		Introduced: 5/29/2001			
Requester:		Cost:	Date Passed: 6/15/2001		
Comment		Title: Resolution supporting the Mission Creek Bikeway Project.			
Indexes:		Sponsors: Daly, Leno, Peskin			
History of Legislative File		011024			
Ver	Acting Body	Date	Action	Sent To	Due Date Pass/Fail
1	President	5/29/2001	REFERRED FOR ADOPTION WITHOUT COMMITTEE REFERENCE AGENDA AT THE NEXT BOARD MEETING		
1	Board of Supervisors	6/4/2001	ADOPTED		P
	Supervisor Peskin requested to be added as a co-sponsor.				
1	Mayor	6/15/2001	APPROVED		

## APPENDIX C (Page 2 of 3): SF Board of Supervisors Resolution

FILE NO. 011024

RESOLUTION NO. 474-01

1 [Supporting the Mission Creek Bikeway Project.]

2  
3 **Resolution supporting the Mission Creek Bikeway Project.**

4  
5 WHEREAS, The Transportation Element of the Master Plan for the City and County of  
6 San Francisco outlines objectives and policies to promote safe spaces for pedestrian and  
7 bicycle traffic, and to encourage the use of bicycles as a means of transportation; and

8 WHEREAS, One of the primary objectives of regional transportation planning efforts  
9 has been to provide alternatives to the automobile as a means of transportation into and  
10 around the commercial centers of San Francisco; and,

11 WHEREAS, The commercial and industrial districts of the South of Market and the  
12 Northeast Mission have experienced rapid land use changes in the last few years, which have  
13 increased both the daytime and residential populations of these areas; and,

14 WHEREAS, Existing land use controls and regulations have not provided a  
15 mechanism to adequately fund improvements to the transportation systems, to keep up with  
16 the pace of real estate development and increased population in these commercial areas;  
17 and,

18 WHEREAS, Existing transportation corridors are generally the most cost effective  
19 places to improve transportation networks, and research has shown that "rails to trails"  
20 projects provide economic benefits into the communities through which they pass; and,

21 WHEREAS, The Mission Creek corridor is a continuous swath of land consisting of  
22 some public streets (Division and Treat Streets) and an adjacent, abandoned railroad right-of-  
23 way, which links the Northeast Mission with South of Market, the Design Center, Pacific Bell  
24 Park and the Caltrain Station, and eventually to the new developments at Mission Bay,  
25 including the new UCSF campus; and,

SUPERVISOR CHRIS DALY, LENO, PESKIN  
BOARD OF SUPERVISORS

Page 1  
5/28/2001

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WHEREAS, The Mission Creek right-of-way has been a premier transportation corridor since the earliest settlements of the Spanish Mission and throughout the development of San Francisco, and was preserved by the first railroad serving the new city of San Francisco in the 1860s, built alongside the once navigable waterway of Mission Creek; and,

WHEREAS, The San Francisco Bay Area Metropolitan Transportation Commission awarded a planning grant for the Mission Creek Bikeway Project to be completed in 2001 with matching funds from the Department of Parking and Traffic; and,

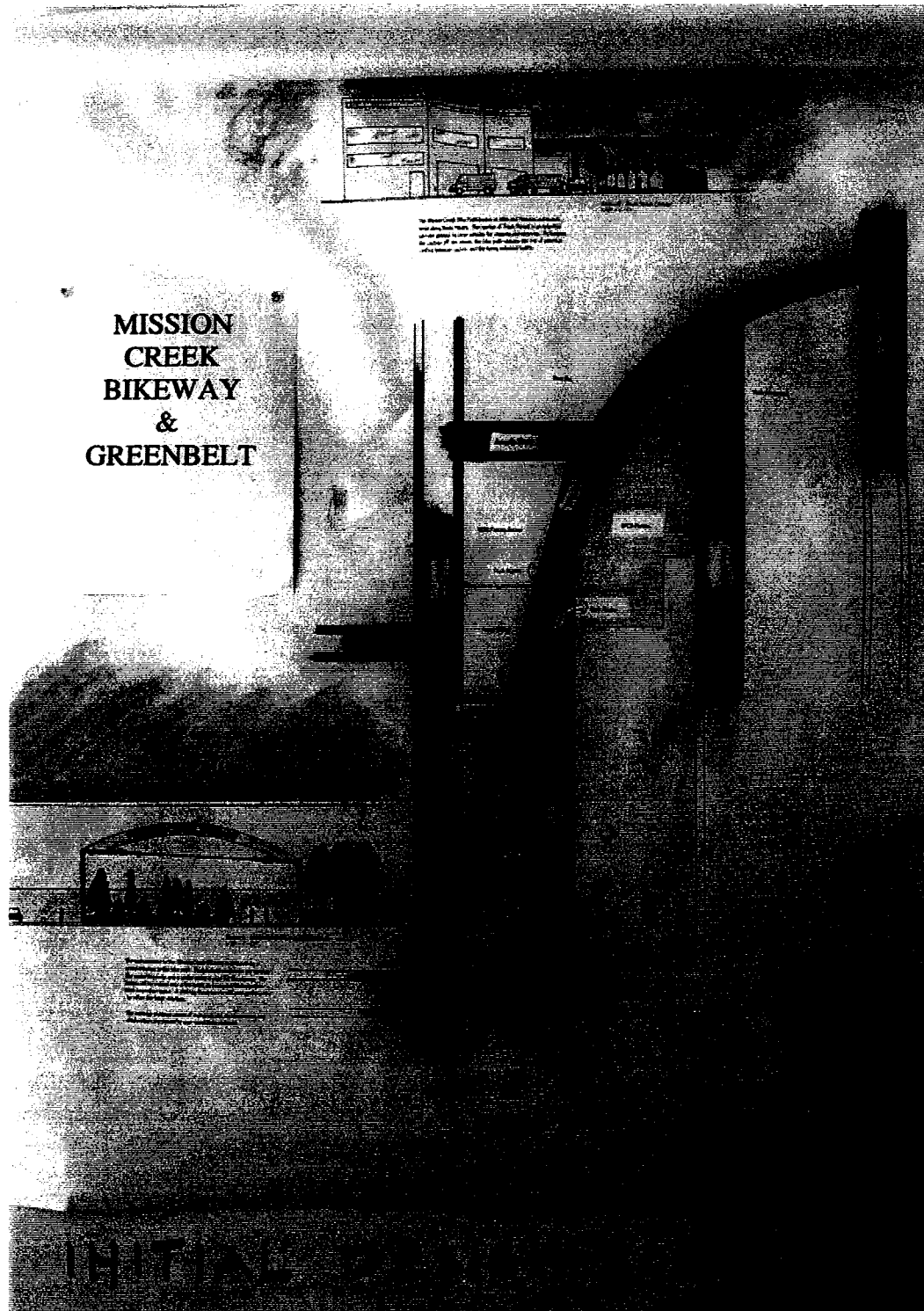
**RESOLVED, That the San Francisco Board of Supervisors supports the Mission Creek Bikeway project and encourages the interdepartmental coordination needed to make the project a reality; and, be it**

**FURTHER RESOLVED**, That the Board of Supervisors urges these City agencies to review opportunities for land trades and street vacations that could be used to expand the public right-of-way along the corridor; and, be it

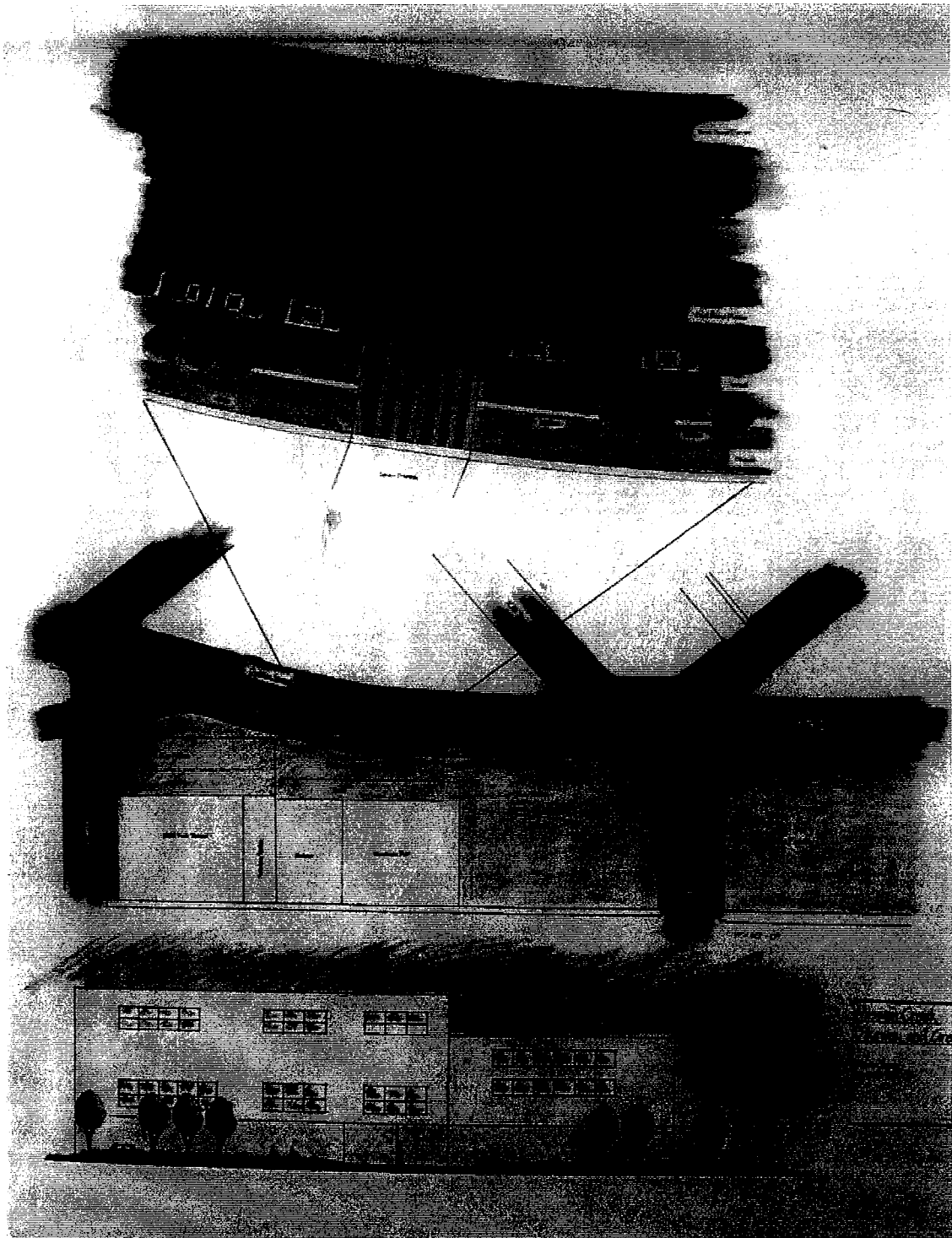
Figure 1. Vegetation resolution. The top row shows a 10m resolution image, the middle row shows a 30m resolution image, and the bottom row shows a 90m resolution image. Each image is labeled with its resolution in the top right corner.

[illegible]

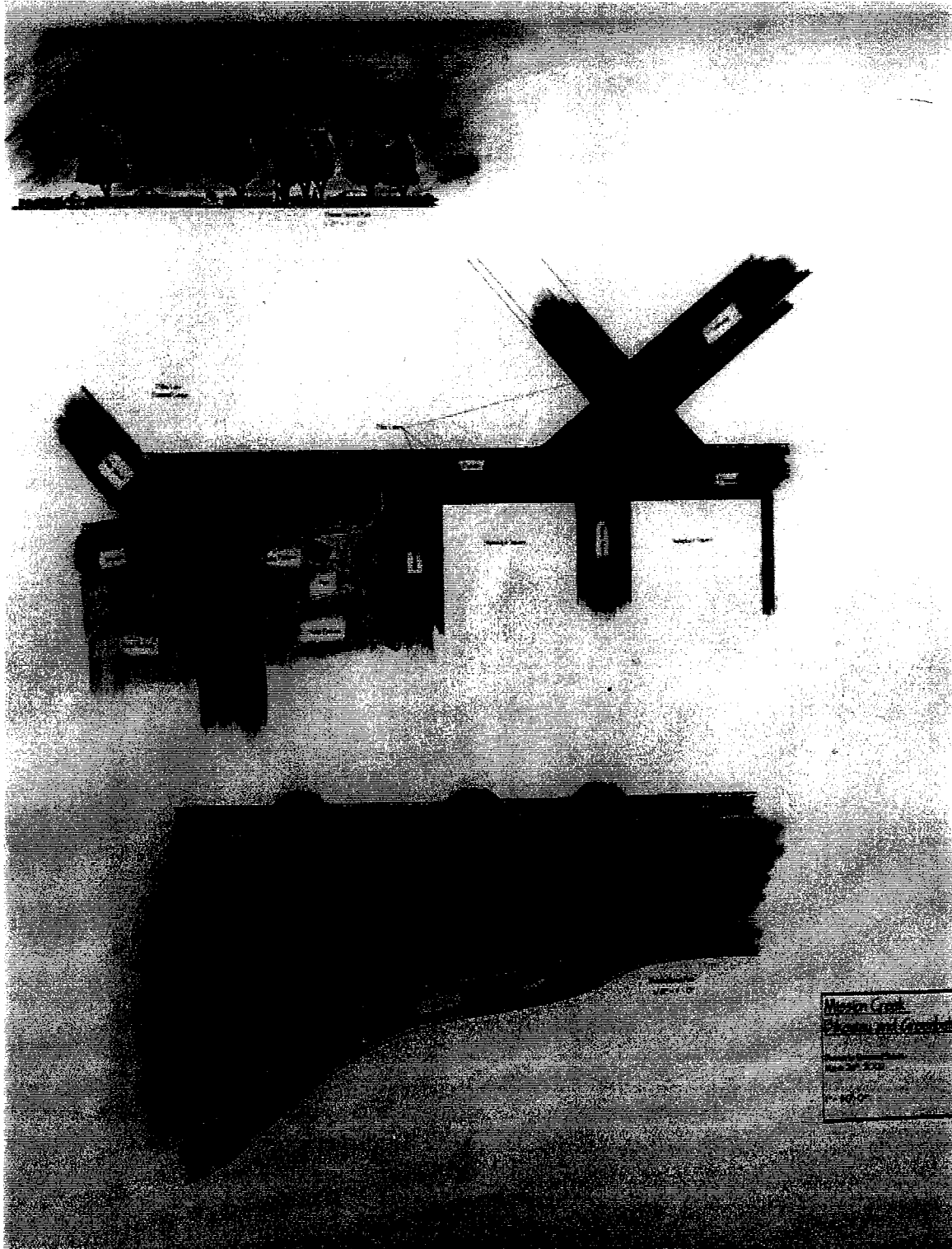
## APPENDIX E (Page 1 of 3): Initial Design Concept



## APPENDIX E (Page 2 of 3): Initial Design Concept



## APPENDIX E (Page 3 of 3): Initial Design Concept



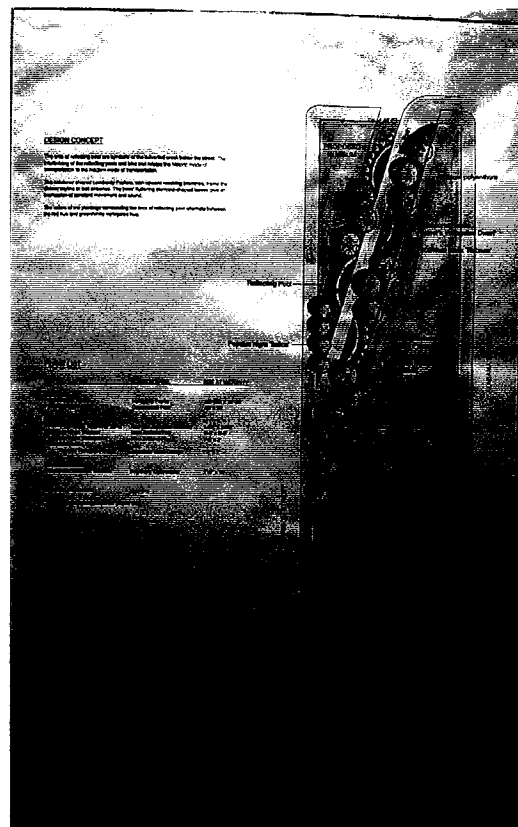
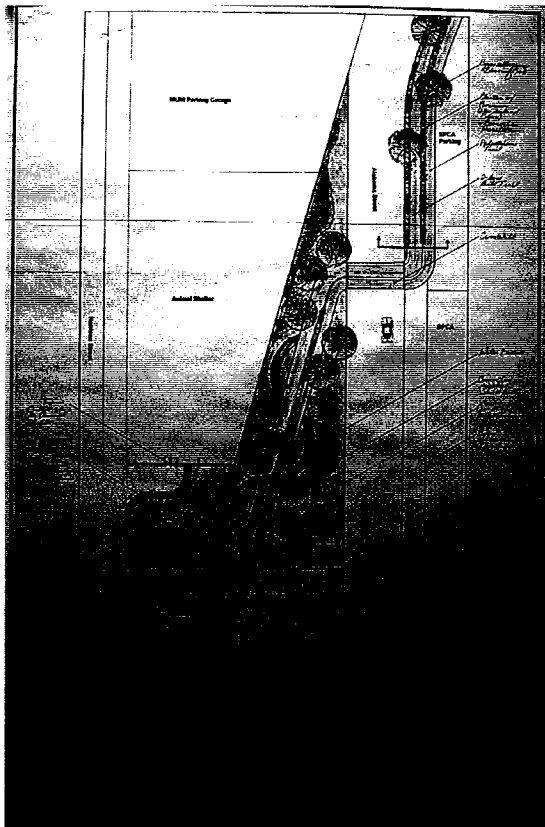
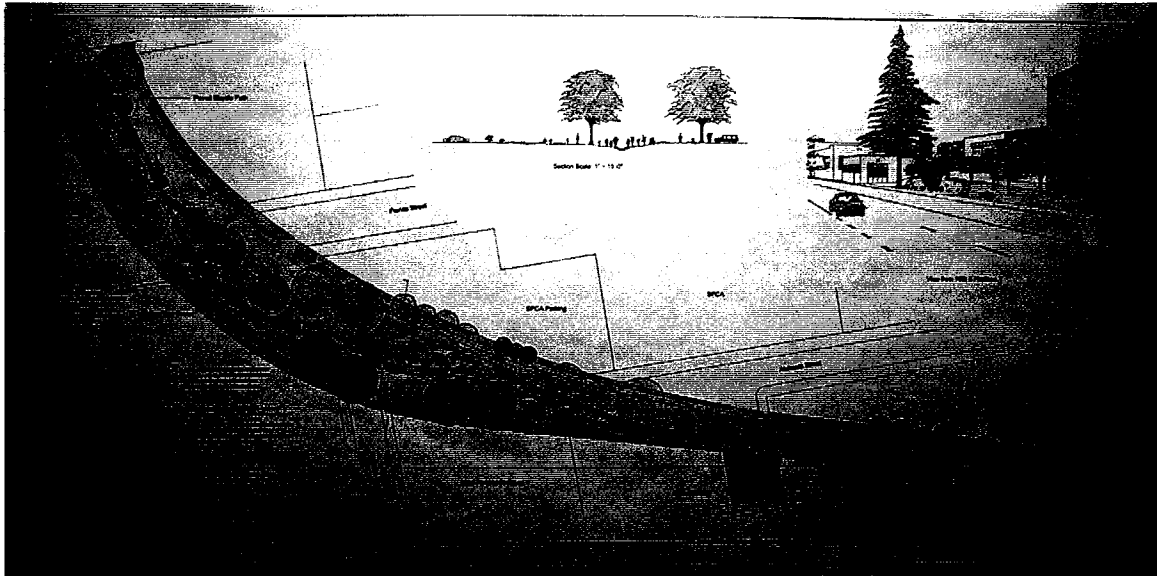


## APPENDIX F: Landscape Species Suggestions

KEY	BOTANICAL NAME	COMMON NAME	COMMENTS
<b>TREES</b>			
ACE	<i>Acer rubrum</i>	Red Maple	Fast growing, showy bracts, red buds
AES	<i>Aesculus californica</i>	California Buckeye	Striking fragrant blooms
ARB	<i>Arbutus unedo</i>	Strawberry Tree	Rich brown bark, showy fruit
CIN	<i>Cinnamomum camphora</i>	Camphor Tree	Striking trunk, beautiful foliage year-round
GIN	<i>Ginkgo biloba</i>	Maidenhair Tree	Bright yellow fall foliage
LIQ	<i>Liquidambar styraciflua</i>	Sweet Gum	Multi-colored fall foliage
MAGK	<i>Magnolia kobus</i>	Kobus Magnolia	Hardy lawn tree, brilliant blooms
MAGS	<i>Magnolia soulangeana</i>	Saucer Magnolia	Coarse foliage, brilliant blooms
PIS	<i>Pistacia chinensis</i>	Chinese Pistache	Bright multi-color fall foliage
THU	<i>Thuja plicata</i> 'Zebrina'	Western Red Cedar	Dark green, slender and graceful shape
<b>SHRUBS &amp; GRASSES FOR CREEK BED MOSAIC</b>			
CAL	<i>Calamagrostis nutkaensis</i>	Pacific Reed Grass	Cal coast native, green/purple tones
CERC	<i>Cercis canadensis</i>	Eastern Red Bud	Fall color, prolific blooms on bare branches
CERO	<i>Cercis occidentalis</i>	Western Red Bud	Cal native, prolific magenta blooms
DESC	<i>Deschampsia caespitosa</i>	Tufted Hairgrass	Important stream bank grass
DESH	<i>D. caespitosa</i> 'Holciformis'	Coastal Hairgrass	Arching inflorescence
DIP	<i>Diplacus longiflorus</i>	Monkey Flower	Cal native, creamy-yellow flowers
EPI	<i>Epilobium canum</i>	California Fuschia	Cal native
FESC	<i>Festuca californica</i>	California Fescue	Excellent for birds, relatively long-lived
FESR	<i>Festuca rubra</i>	Red Fescue	Excellent for birds, relatively long-lived
HOR	<i>Hordeum brachyantherum</i>	Meadow Barley	Fast growing, cool weather grass
IRI	<i>Iris douglasiana</i>	Douglas Iris	Striking spring blooms
MUH	<i>Muhlenbergia rigens</i>	Deergrass	Striking ornamental grass
NASL	<i>Nasella lepida</i>	Foothill Needlegrass	Cal native, extremely long-lived, graceful
NASP	<i>Nasella pulchra</i>	Purple Needlegrass	California's state grass
<b>SHRUBS FOR PATHWAY &amp; PARK</b>			
ARB	<i>Arbutus unedo</i>	Strawberry Tree	Useful as tree and shrubs
ARCPM	<i>Arctostaphylos</i> 'Pacific Mist'	Pacific Mist Manzanita	Cal native, dense foliage
ARCT	<i>Arctostaphylos tomentosa</i>	Glossy Leaf Manzanita	Cal native, dark foliage, distinct bark
ART	<i>Artemisia californica</i>	California Sagebrush	Cal native, grey/green foliage
DIP	<i>Diplacus longiflorus</i>	Monkey Flower	Cal native, creamy-yellow flowers
LUP	<i>Lupinus arboreus</i>	Coastal Bush Lupine	Cal coastal native, striking blooms
MAH	<i>Mahonia aquifolium</i>	Oregon Grape	Excellent for birds, edible fruit
RHA	<i>Rhamnus californica</i>	Coffeeberry	Cal native, glossy leaf, large fruit
RHAC	<i>Rhamnus crocea</i>	Redberry	Long, glossy leaves, red fruit
RIB	<i>Ribes sanguineum</i>	Winter Currant	Cal native, brilliant winter blooms
RIBV	<i>Ribes viburnifolium</i>	Evergreen Currant	Arching leaves, brilliant blooms
SAL	<i>Salvia spathacea</i>	Hummingbird Sage	Showy blooms, fragrant foliage

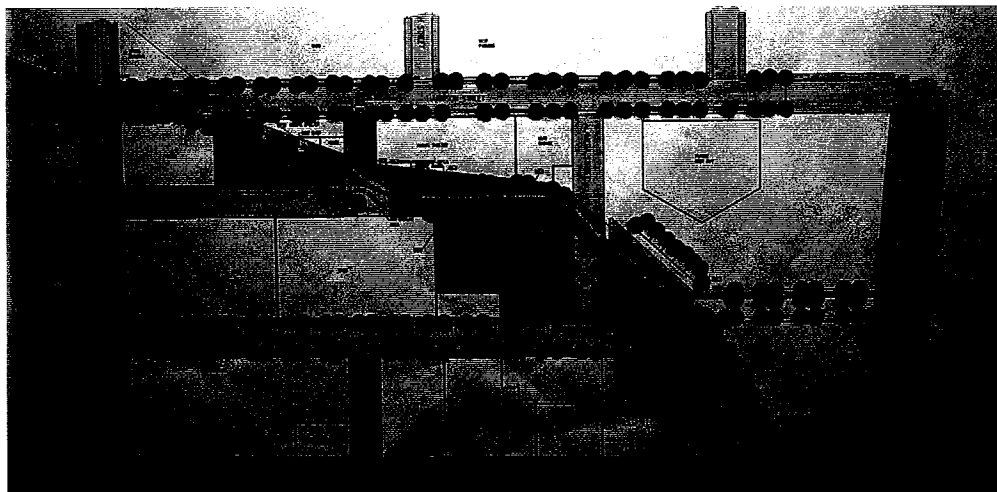
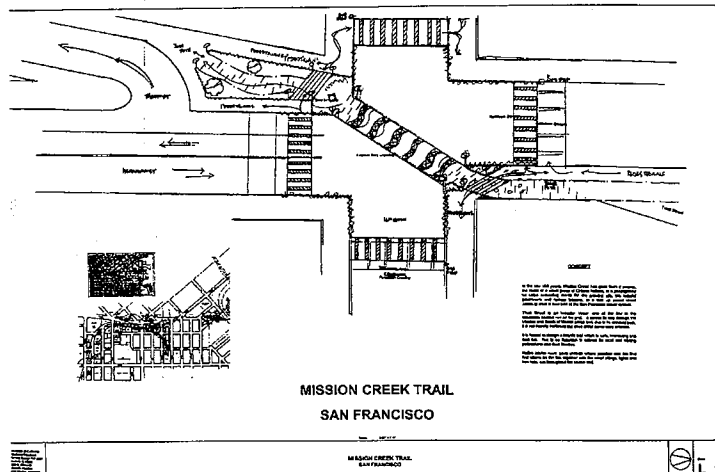
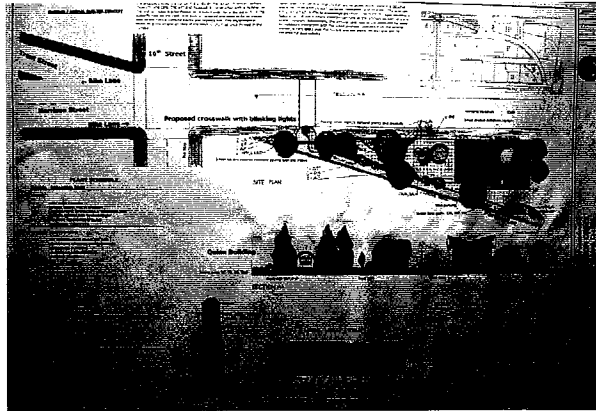
Planting suggestions courtesy of Melissa Willman and Julia Sanders

# APPENDIX G (Page 1 of 3): Planting Design Class Projects



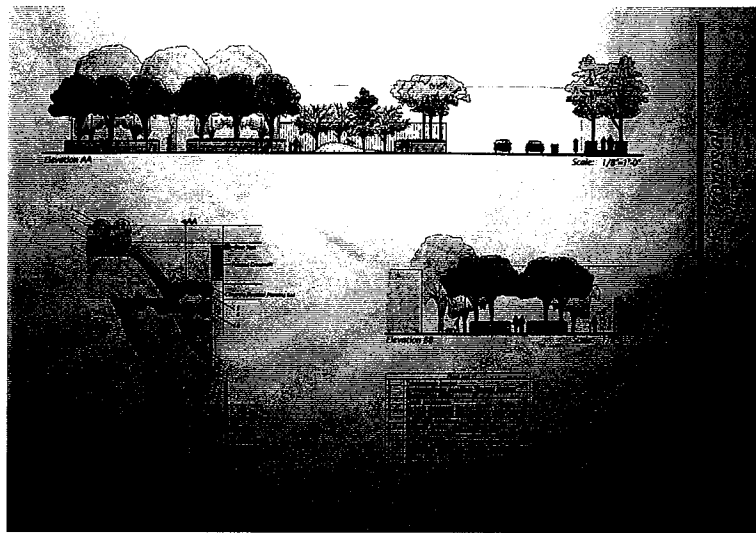
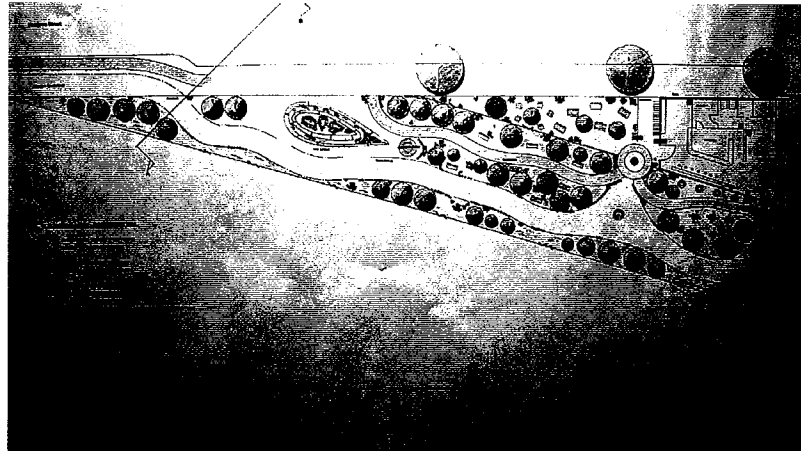
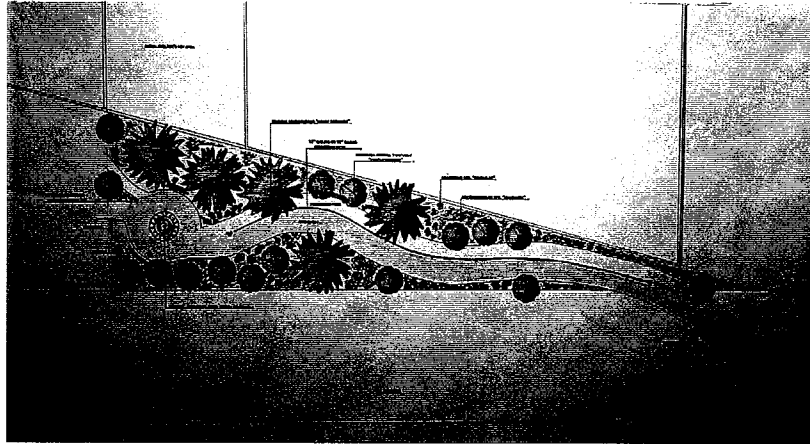
Top: Ivor Thomas; Bottom left and right: Kate Michels, Amir Kunin, Shirley Geis

## APPENDIX G (Page 2 of 3): Planting Design Class Projects



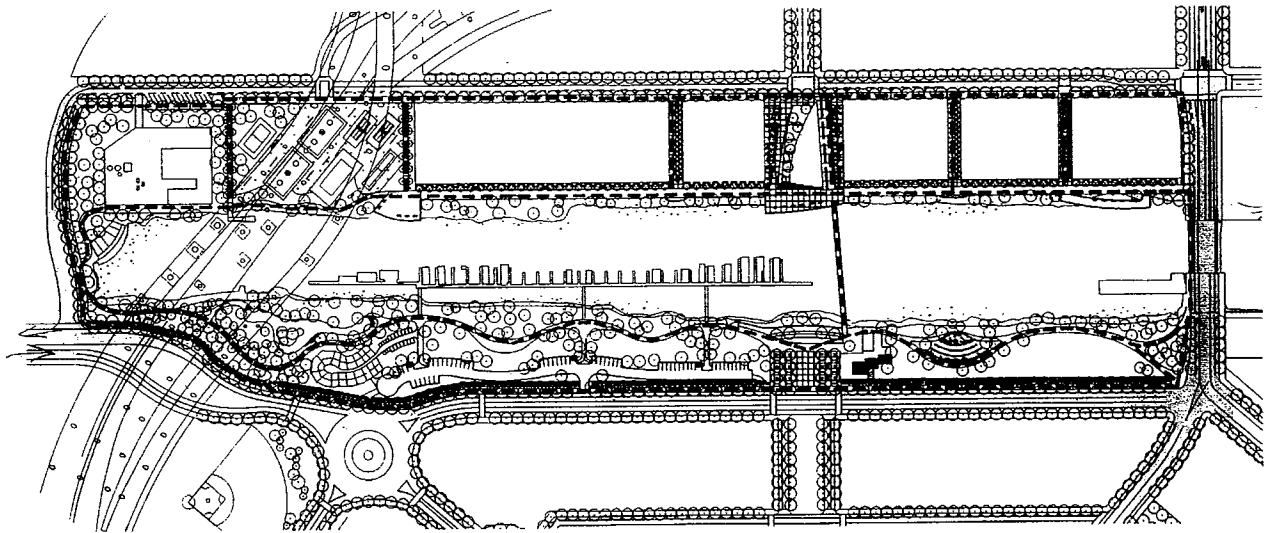
Top: Marge Tibbetts; Middle: Janet Pigot, Ellen E. Edwards, Aileen N. Hodgkin,  
Bottom: Lisa Charpontier, Claudia Olalla, Rick Harker

## APPENDIX G (Page 3 of 3): Planting Design Class Projects



Top And Middle: Janet S. Pigot, Ellen E. Edwards, Ailleen N. Hodgkin; Bottom: Kristine Gillespie

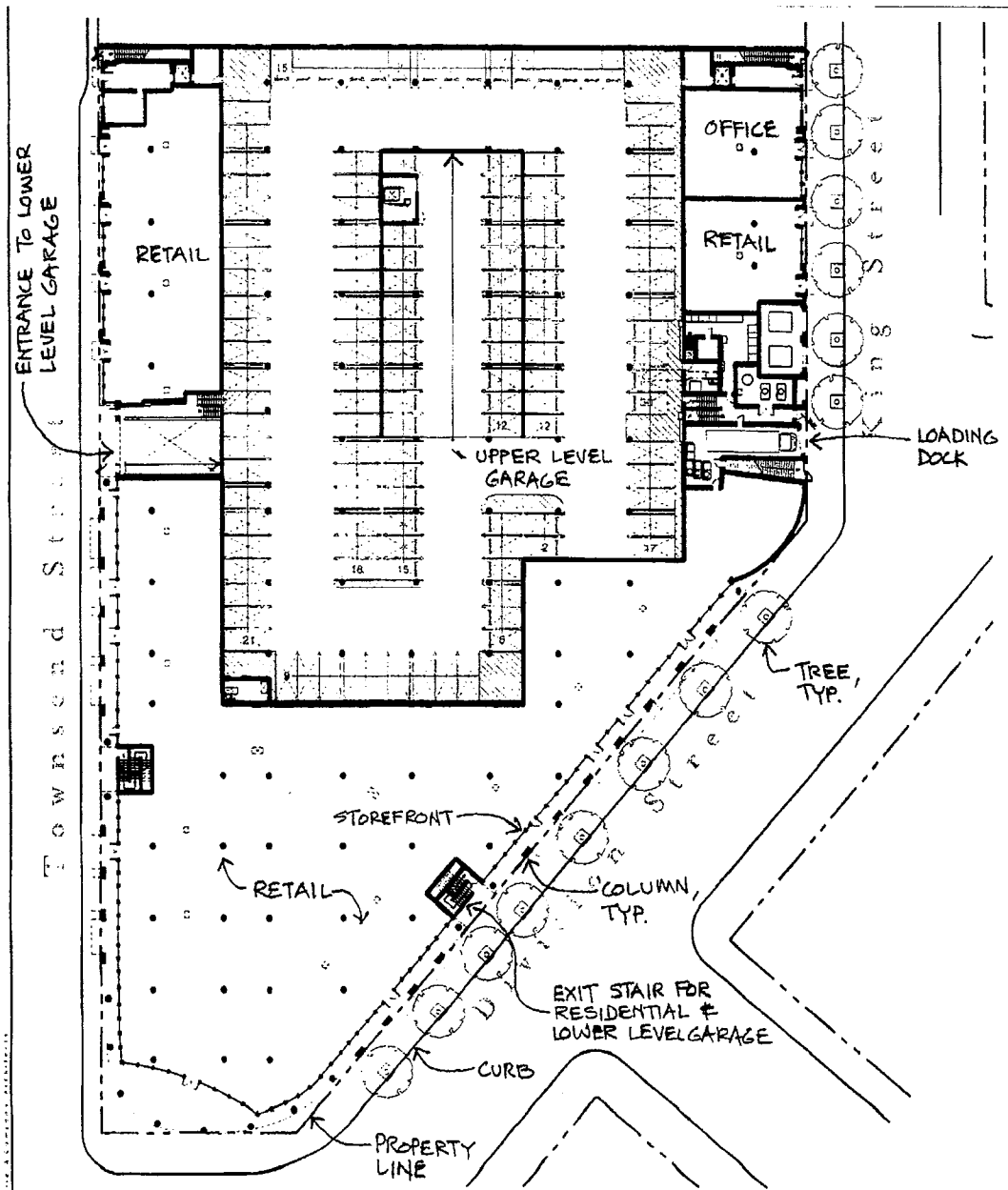
# APPENDIX H: Mission Creek Park Plan



CIRCULATION KEY 1" = 200' - 0"

- MISSION CREEK PARK PEDESTRIAN CIRCULATION
- CITY SIDEWALK
- CLASS 1 BIKE TRAIL
- VEHICULAR CIRCULATION

# APPENDIX I: 675 Townsend St. Ground Floor Plan



## GROUND LEVEL FLOOR PLAN

May 14, 2002

SCALE 1"=50'-0"

## 675 TOWNSEND STREET

675 Townsend Street San Francisco California

## MG&Co

ARCHITECTS

MICHAEL CUTHRIE & COMPANY

821 Fourth Street, Suite 210 San Francisco, California 94107

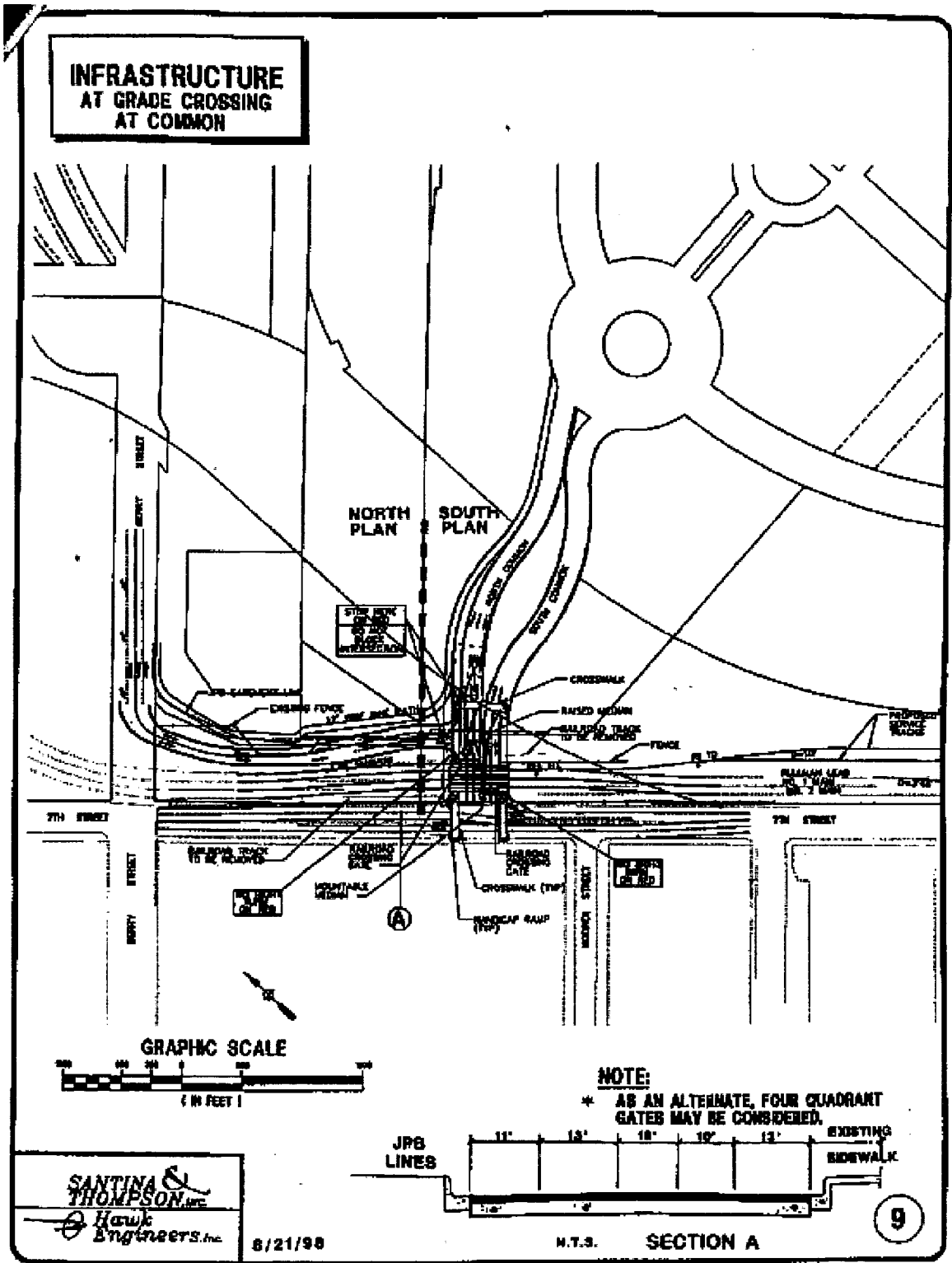
3107 Fourth Street, Suite D, Berkeley, California 94702

TELEPHONE: 415.777.0101 510.847.4678

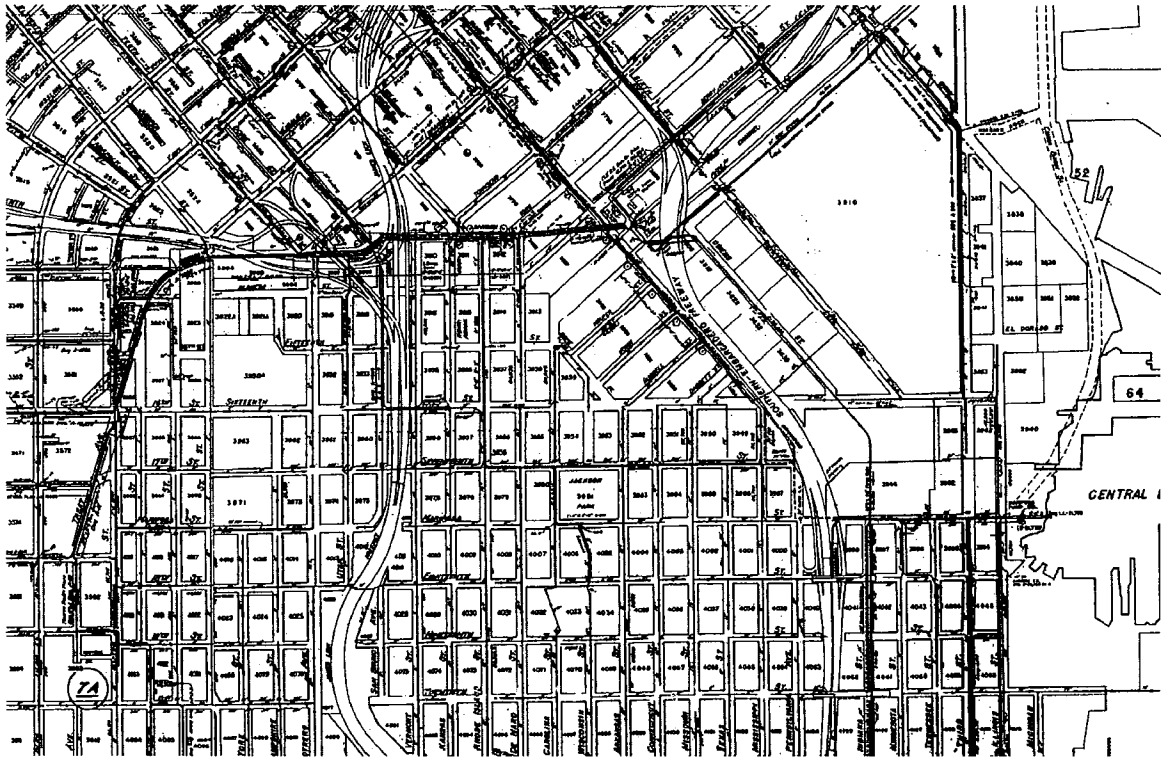
FACSIMILE: 415.777.0102 510.847.4676

INTERNET: www.mgandco.com

# APPENDIX J: Mission Bay Commons Crossing Plan



## APPENDIX K: Sewer System Map





# APPENDIX L: MCB Walking Tour Guide

## Tour of San Francisco's Mission Creek Bikeway and future Greenbelt

Begin at the Mission Creek Mosaic Mural at the corner of Harrison, Treat & 16th Streets. 8.5' x 15' tile and mosaic mural designed and fabricated by Laurel True and Lillian Sizemore for the Bikeway Markers project by Judy West.

From this intersection you can see the trace of the now underground river which once ran diagonally through this intersection. Treat St. was built along side the river which accounts for its diagonal orientation. A bridge crossed the river at this location which is depicted in the mural. 16th Street (which used to be called Centre St.) was the main boulevard of the Mission settlement, even before the Gold Rush. Crossing the river at this location, one could reach the deeper waters of the Bay to the east.

The bridge was located at a "narrows" of the river where the land was slightly higher and firm on either side of the river. Center Street (now called 16th St) will soon be revitalized again as the City needs to reconnect with the new developments coming at Mission Bay.

The San Jose to San Francisco railroad was built along the river trace and some of the tracks still remain on Treat heading north toward Division and Bryant, following the gentle curve of the subtle, natural terrain. The hill east and south of the river was called Potrero Nuevo ("new grazing lands" in Spanish).

Head north and east along Treat St., diverted around the Animal Shelter "dog park" which now occupies a sliver of Treat St. at 15th. Treat St. and the river make a sweeping turn gently to the east by the time you reach Bryant St. The railroad tracks and right-of-way were on your right, recently paved over for parking by the city right, recently paved over for parking by the new owners of this property, the SPCA. The future railroad track removal and street reconstruction along the City owned sections of Treat St will provide an opportunity for new green space, art and a safe route for bicycles.

At the corner of Bryant you need to jog left to get onto Division. Both the railroad and Treat St. used to continue straight across Bryant here but the streets were reconfigured when the overhead Central Freeway was built. This southeast corner of Bryant and Division is a candidate for expanded public access to better enable the flow of bicycle traffic around this difficult corner and onto Division.

Follow Division "down-stream" toward the Bay. Note the railroad right-of-way along the right (south) side of Division (recently paved for parking lots) which remains a continuous swath of open land and a priceless transportation artery and asset of the City. The inclusion of a greenbelt will help foster awareness of the waterway underground and prevent pollution of the bay.

The streets on either side of Division do not line up because Division is actually located on top of the river itself which was filled in by man. This is the most dangerous section of the Mission Creek route currently for bicycles and pedestrians because there is heavy traffic, the street is narrow and the sidewalk is substandard.

At the intersection of Division and Potrero there was once a draw-bridge over the river to Brannan. Potrero was the main road heading south from town and Brannan was the connection to the commercial center South of Market. The river followed the contour of Potrero Hill, curving around its northern nose.

Note the rise in elevation on the Potrero Hill side of the river. This immediate area was noteworthy after the 1906 earthquake as the land on the south side (solid ground) was relatively undamaged and the property on the north side of Division was heavily twisted and damaged due to the soft soils of what were once salt marshes and artificial fill dumped onto the river.

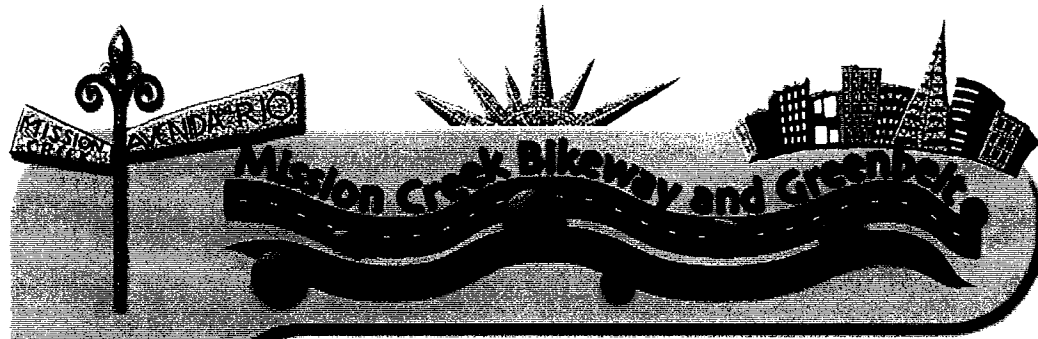
Past Potrero, on Division, the route is less crowded and the meandering nature of Division St. appears more like a river. At the intersection of 9th, San Bruno and Division is an island in the middle of the street where a public sculpture is planned.

The intersection of 8th and Townsend (town's end) represents the opening of the river mouth into the vast Mission Bay. Southeast of Townsend and northeast of 8th was once all under water.

The railroad right-of-way continued straight ahead, though the slot next to the gravel yard, to meet with the main rail line along 7th St. There is a sewer easement between the buildings, protecting the route from development, but you have to go around via King St or Berry to get to 7th Street and eventually on to Mission Bay.

Visit our website: [www.missioncreek.org](http://www.missioncreek.org)

# APPENDIX M: Community Meeting Flyer



**Please attend**  
Help make this world-class bikeway a reality.  
Attend one of the first community meetings:

**Monday, April 23rd**  
• 8:30 - 9:30 A.M.  
• 6:00 - 7 P.M.  
Exhibit open 4 - 7:30 P.M.

Both meetings located at  
Southern Exposure Gallery  
at 401 Alabama/17th St.  
between Bryant & Harrison

**Watch for updates on**  
Mission Creek Bikeway site  
@ [www.missioncreek.org](http://www.missioncreek.org)  
or call the SFBC at  
415-431-BIKE, x-2

**Check our Exhibit**  
Ongoing storefront exhibit  
History, art, maps  
405 Florida Street @ 17th.  
Special Thanks to R.A.M.

**We need your help**  
Get involved, attend  
meetings, write letters,  
send donations, etc.  
We would appreciate your  
support. Call the SFBC  
@ 415-431-BIKE x2.

## THE VISION

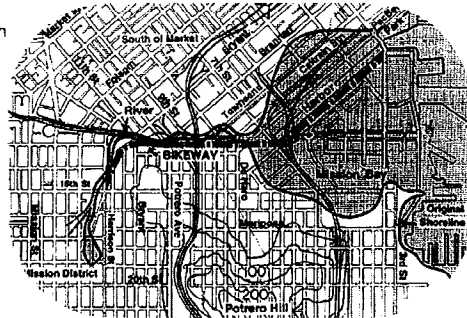
What is today an abandoned rail corridor running through a neglected swath of industrial land in San Francisco's Mission and South of Market neighborhoods could be transformed into a pleasant and purposeful bikeway lined with green space and public art. The Mission Creek Bikeway will also serve as a critical transportation link in a city where 1 in 25 adults use bicycles for daily commuting. This rails-to-trails concept is based on successful examples around the world of rail lines recycled into greenways that sprout tangible economic, social, and environmental benefits to the surrounding community.

## THE ROUTE

The Bikeway would begin at 16th and Harrison Streets, wind around the nose of Potrero Hill, along side Division St. cross 7th St. and the CalTrain tracks into Mission Bay. Continue along the south side of the channel, connecting with the new Giants stadium and the waterfront. At the 8th and Townsend circle, a connecting Bikeway along the east side of Townsend St. will connect with the CalTrain depot. People of any age could ride a bike or walk from the Mission district to SOMA and Mission Bay almost entirely on a safe, comfortable & convenient pathway.

## THE HISTORY

Before European settlers arrived in San Francisco, the site of the proposed start of the path at 16th & Harrison Streets was a landing point for the Ohlone Indians, who paddled tule reed balsas from the Bay into Mission Creek. In the 1860's, rail planners took advantage of the creek's flat grade to build the San Jose and San Francisco rail line along the shore of the navigable waterway. Today the creek is a sewer buried beneath city streets and most of the rails have been ripped up, its natural history and transportation value largely forgotten.



## NEXT STEP: YOUR INPUT IS NEEDED

During the next few months, you can help shape this exciting opportunity to develop a world-class greenway. Please join us at one of the upcoming community meetings (see box at left) and contact project organizers to learn other ways to get involved. This planning phase is being supported by a \$20,000 grant from the Metropolitan Transportation Commission and a matching \$10,000 grant from the S.F. Department of Parking and Traffic, and support from PowerBar. Project organizers include:



[www.missioncreek.org](http://www.missioncreek.org)

Special thanks to Digipop, Wessling Creative Group, Alon Picker and Q & A Multimedia

# APPENDIX N: Community Survey

## Mission Creek Bikeway Planning Study 2001

The Mission Creek Bikeway and Greenbelt Project aims to reconfigure sections of the Mission Creek right-of-way along Division Street, to encourage alternatives to the use of automobiles in a commercial area of San Francisco undergoing rapid re-development. The historic transportation corridor under review, runs along Treat and Division Streets, from 16th & Harrison to Mission Bay. The route includes some City streets, some Caltrans storage & parking lots, and some railroad parcels purchased recently by private entities. - Treat/Division Street was the river itself - (see map on other side)

### Land Use Questionnaire:

Solicited from a community of "stakeholders" in the project, which includes nearby residents and businesses, property owners, neighborhood organizations, public service non-profits serving nearby citizens, City & State agencies, and individuals who have expressed interest in the project, the neighborhood or bicycle & transportation issues. For more info: [www.missioncreek.org](http://www.missioncreek.org)

What kind of "stakeholder" are you? \_\_\_\_\_  
Bring to one of the planning meetings; Or Mail to: 499 Alabama #203, 94110; Or Fax: (415) 552-7558

1) How would you rank the **priorities** in allocating space along this broad right-of-way? Rank each of the following 1 - 6: and please include comments;

- \_\_\_ **Public Art** to commemorate, educate and foster awareness of the underground river beneath the corridor; San Francisco's premier inland waterway, serving the original settlement of the Mission
- \_\_\_ **Green Space** to replenish Oxygen, clean exhaust from the air and remind us of the river bank, which is all but forgotten: (Includes trees and other landscaping)
- \_\_\_ **Off-street Bikeway & Pedestrian Path**, to create incentives to reduce automobile usage, and to provide a safe link to key bicycle routes through a growing commercial district of the City.
- \_\_\_ **MUNI line**, with link to the new N-Judah at King Street in Mission Bay, along Division and Treat Streets, to the intersection of Sixteenth Street and then south on Harrison.
- \_\_\_ **Parking Lots**; Only leased to businesses? \_\_\_ Or available to clients/ customers? \_\_\_
- \_\_\_ **On-street parking**; Posted with limited time? \_\_\_ coin meters? \_\_\_ free all day? \_\_\_

2) Any suggestions for how to utilize the diagonal section of Treat / Division Street between 15th & 16th Streets? Please describe.

3) Are there places where parking on City streets, near to, but not on the route itself, might be reconfigured to accommodate more on-street parking? Please describe.

4) Any other comments or suggestions?

